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Team -Member Exchange and Trust Contexts: Effects on Individual Level Outcome Variables Beyond the Influence of Leader -Member Exchange.

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**TEAM-MEMBER EXCHANGE AND TRUST CONTEXTS: EFFECTS ON
INDIVIDUAL LEVEL OUTCOME VARIABLES BEYOND THE INFLUENCE OF
LEADER-MEMBER EXCHANGE**

A Dissertation

**Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy**

in

The Interdepartmental Program in Business Administration (Management)

by

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Abstract

Researchers and theorists have recognized the importance of multilevel research to gain a better understanding of organizational behavior. In particular, there is a need to assess leader-member exchange in the context within which the relationship takes place. This study assessed the associated effect of leader-member exchange and two contextual variables, team-member exchange and trust context, on individual performance, organizational citizenship behavior, fairness perceptions, and job satisfaction. At the individual level, supervisor ratings of leader-member exchange were positively associated with performance, organizational citizenship behavior directed at both individuals and the organization, fairness, and job satisfaction. Contextual effects were found for both team-member exchange and trust context. Each variable predicted incremental variance in organizational citizenship behavior, fairness perceptions, and job satisfaction beyond that explained by leader-member exchange. Contextual effects were not found for performance. Implications of the results for research and practice are discussed.

Chapter 1: Introduction

As organizational research matures, it is clear that researchers cannot ignore the multilevel, hierarchical nature of organizations (Bryk & Raudenbush, 1989; Mossholder & Bedeian, 1983; Rousseau, 1985). Integrally related to the fact that organizations are multilevel entities is the issue of context, the idea that simply being a part of an organization or an organizational group can affect an individual's behaviors and attitudes (Cappelli & Sherer, 1991). Relationships between the organizational levels of analysis transpire when phenomena at one level influence, or are influenced by, factors at another level of analysis (Hofmann, 1997; Hofmann, Griffin, & Gavin, in press). Multilevel relationships are often manifested in micro organizational behavior research. For example, the associations between departmental characteristics and employee attitudes/behaviors are demonstrated in the various interactions occurring when the situation in which individuals operate affects their responses (Pervin, 1989).

The introduction of this study briefly highlights issues concerning the multilevel nature of organizations and the role of context in organizations. A much researched individual level construct, leader-member exchange, is also discussed in relation to the context within which the leader-member exchange relationship occurs. In addition, the two contexts to be examined in this study, team-member exchange and trust context, are briefly introduced.

Multilevel Nature of Organizations

Organizations are multilevel, hierarchical phenomena (Hofmann, 1997; Hofmann et al. in press; House, Rousseau, & Thomas-Hunt, 1995). Their very

structure includes individual employees who are embedded in groups and departments, which are in turn nested in facilities. Individual facilities are nested in organizations. Thus, a distinctive characteristic of organizational phenomena is that processes at several levels of analysis may potentially be interrelated (House et al., 1995). Many concepts of interest to micro organizational researchers may not be completely understood by studying only the individual level of analysis. For example, two areas salient in the present study, leadership (e. g., Graen & Uhl-Bien, 1995; Waldman & Yammarino, 1999) and groups (e. g., Kidwell, Mossholder, & Bennett, 1997; Wech, Mossholder, Steel, & Bennett, 1998), have been advanced by research involving phenomena existing above the individual level of analysis. Some researchers argue that multilevel research results in a more comprehensive understanding of organizations (Klein, Tosi, & Cannella, 1999). Such an understanding recognizes the influence of organizational or group context on individuals' behaviors and perceptions. Different levels of analysis can cause similar phenomena to be manifested differently and to have distinct causes and effects (House et al., 1995).

If simply being in an organization in some way can influence behavior (Cappelli & Sherer, 1991), it would seem prudent to consider the notion of organizational context more closely. Some researchers portray organizations as social entities that produce contexts influencing both the attitudes and actions of individuals (House et al., 1995). Context has been defined as "the surroundings associated with phenomena which help to illuminate that phenomena, typically factors associated with units of analysis above those expressly under investigation" (Cappelli & Sherer, 1991, p. 56) and "the setting in which individuals, groups, or organizations operate as well as

to their constitutive parts" (House et al., 1995, p. 74). Therefore, an important social context for organizational behavior research with its focus on individual behavior and attitudes is the more immediate environment external to the individual employee, which is often defined by the work group comprising coworkers and their supervisor.

Statement of Problem

Several authors have called for research addressing issues concerning the multilevel, hierarchical nature of organizations and the effect of organizational context on individuals (Cappelli & Sherer, 1991; Mowday & Sutton, 1993; O'Reilly, 1991; Rousseau, 1997; Rousseau & Fried, 2001). Several of these authors have emphasized that researchers should devote more attention to contextual effects influencing organization members. Yet, the predominant focus of organizational behavior research is still on the study of individual behavior and attitudes.

Arguably, perhaps nowhere else should the multilevel nature of organizational phenomena be considered than in the area of leadership. In particular, leader-member exchange theory (Graen & Scandura, 1987) posits that individual characteristics of a supervisor and subordinate will influence their behavior and attitudes, but also that processes unique to the dyadic relationship between these two parties will influence their behavior and attitudes as well. While most leader-member exchange research has been conducted at the individual level of analysis because of the relational nature of the theory, there have been attempts to discern whether particular outcomes are dyadic or even group-based (e.g., Dansereau, 1995; Schriesheim, Neider, & Scandura, 1998; Williams, Podsakoff, & Huber, 1987).

There have been surprisingly few attempts at examining potential contextual effects with regard to leader-member exchanges, that is, investigating the effects that certain contexts may have on leader-member exchange per se or its relationship with important organizational outcome variables. A particularly useful approach for examining this kind of phenomena is cross-level modeling and research. Cross-level research assesses the effect of a variable at one level of analysis on a variable at a different level of analysis (Klein et al., 1999; Rousseau, 1985). The present study will examine two different cross-level effects in connection with leader-member exchange. In particular, the incremental effect of two contextual variables on individual outcome variables will be examined. The contextual variables to be considered are team-member exchange and trust context, both of which are hypothesized to have important effects on several individual outcomes in organizations: performance, organizational citizenship behavior, fairness perceptions, and job satisfaction. Team-member exchange and trust context describe the general tenor of exchange relationships occurring between individual employees and their coworkers and supervisors.

With regard to interactions within typical work group structures, leader-member exchange can be considered a key variable. In particular, leader-member exchange addresses the work relationship between a manager and individual subordinates (Dansereau, Graen, & Haga, 1975). According to the leader-member exchange approach, managers differentiate between subordinates in their work group. In general, managers and their subordinates can develop either high quality or low quality exchange relationships. High quality exchanges resemble partnerships based

on respect, trust, and mutual obligation, while low quality exchange relationships are specified within the bounds of the employment contract.

Like some leadership theories proposed in the past three decades, leader-member exchange theory also poses contextual or situational factors as boundary conditions that form the foundation of the theoretical premises (Cogliser, 1996). In particular, the work unit context within which the manager-subordinate dyad resides is important to study because such dyads may be affected by that context (Hare, 1992). Because leader-member exchange is fundamentally relational in nature, the social context within which it occurs should be recognized and better understood (Cogliser, 1996; Graen & Uhl-Bien, 1995; Liden, Sparrowe, & Wayne, 1997; Uhl-Bien, Graen, & Scandura, 2000).

This study examines behaviors and attitudes of relevance to leader-member exchanges within the context of organizational work groups. The two contextual variables examined in the study are briefly outlined below. These variables are discussed in more detail in Chapter 2.

Team-Member Exchange

Team-member exchange assesses the quality of the relationship between a member and the peer group (Seers, 1989). It indicates the reciprocity between a work unit member and other members of the group in reference to the individual's contribution of ideas, feedback, recognition, and assistance to others and, in turn, the individual's receiving the same from other group members. Some researchers have noted that individual team members may tend to blend or merge their perceptions of various role exchanges across work group members into a summary whole (Seers,

Petty, & Cashman, 1995). This combination of perceptions results in an individual formulating a perception of the quality of the exchange across the group, in addition to perceptions of the quality of the exchange with particular individual work unit members.

In response to competitive challenges, organizations have expanded their use of teams dramatically, and researchers have commensurately increased their emphasis on the study of groups. Organizations are becoming increasingly dependent on work groups for both structural and process reasons (Guzzo & Shea, 1992). Groups are essential in accomplishing specific organizational goals as well as broader organizational plans (Bettenhausen, 1991). In light of this trend, it is possible to discern two contributions that will be achieved in studying team-member exchange as a contextual variable in connection with leader-member exchange. First, the literature on groups in organizations will be advanced by looking at the exchange relationships within work units and their impact on important behavioral and attitudinal outcomes. Another contribution of this study will be to use appropriate aggregation methodology to operationalize team-member exchange at the group level. Team-member exchange logically should be conceptualized at the group level. To date, this conceptualization has not been performed utilizing appropriate procedures. By doing so, this study broadens our understanding of the concept and expands social exchange notions to an area that has not been well researched.

Trust Context

Whereas leader-member exchange deals with the exchange relationship between a manager and his or her subordinates (Graen & Scandura, 1987), trust

involves aspects of the broader relationship between a subordinate and the supervisor (Whitener, Brodt, Korsgaard, & Werner, 1998). Trust may originate from the work task relationship, but grow to include the interpersonal relationship as well. Trust has been defined as a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). Trust as examined here includes an emotional attachment that represents a sincere care and concern for the individuals involved (McAllister, 1995).

Most often, trust has been examined at the individual level of analysis. In particular, a focus is placed on individual characteristics or behavior displayed by the trustor, trustee, or both. Recently however, Rousseau et al. (1998) and Kramer (1999) have called for researchers to view trust as a multilevel construct. Trust is a complex phenomenon that requires its study at several levels. Of relevance to the present study, theoretical work in a special issue on trust appearing in the Academy of Management Review (e.g., Jones & George, 1998; Rousseau et al., 1998; Whitener et al., 1998) suggests that the study of trust should integrate micro level psychological processes with group dynamics. In the present study, trust context will be viewed as the perceived level of trust between the group as a whole and the supervisor. Thus, a contribution of this study is to assess trust at the group level and consider its contextual effects in connection with leader-member exchange dynamics. In doing so, the study broadens our understanding of trust and its interconnections with leader-member exchange.

Summary

This chapter introduces the groundwork for the remaining chapters of this study by highlighting the lack of attention to the multilevel nature of organizations and to the idea that leader-member exchange takes place within the context of the work group. Chapter 2 presents the theoretical and empirical development of the hypotheses that are presented in this study. Chapter 3 describes the sample, procedure, and measures used to test the hypotheses. Chapter 4 presents the results of the data analyses. Finally, Chapter 5 discusses the results of the study and provides direction for future research and practical implications.

Chapter 2: Hypotheses

As noted in Chapter 1, the role of organizational context has gained increasing attention from organizational behavior researchers. A fundamental framework for understanding interactions among work group members, the social information processing perspective (Salancik & Pfeffer, 1978) provides a general basis for explaining contextual phenomena within organizations, and is particularly useful in describing connections between this study's focal contextual variables--team-member exchange and trust context--and leader-member exchange. Social information processing tenets are employed in the present study to explain expected contextual effects, as they describe one tenable means by which social interaction among individuals gives rise to salient group contexts. Because social interaction is a given in exchange relationships, the social information processing perspective is a logical theoretical choice.

A key assumption of social information processing is that individuals adapt their attitudes and behaviors to their social context. According to the social information processing approach, a person's environment produces signals about which aspects of the context are most characteristic of the work setting (Pfeffer, 1981), thus providing information pertaining to dimensions of greater importance. The work environment also provides indications of how others evaluate the context on each of these dimensions. Lastly, the context helps provide positive or negative cues about the work environment, allowing individuals to make sense of the affective reactions that commonly occur there. This study proposes to examine the combined effect of leader-member exchange and two different contextual variables, team-member exchange and

trust context, on performance, organizational citizenship behavior, fairness perceptions, and job satisfaction.

This chapter proceeds as follows. First, the concepts of team-member exchange and trust context are presented and discussed. Next, the individual level relationships under consideration are delineated. In particular, a focused review of leader-member exchange research is presented with regard to the outcome variables of performance, organizational citizenship behaviors, fairness of the supervisor, and job satisfaction. The chapter closes with an explication of the cross-level effects to be assessed. Specifically, the relationships involving team-member exchange and trust context are discussed with regard to the aforementioned individual level variables.

Team-Member Exchange And Trust Context

Team-Member Exchange

Team-member exchange examines exchange relationships among work group/team members (Seers, 1989). It measures individuals' willingness to assist other members, to share ideas and feedback, and in turn, how readily information, assistance, and recognition are received from other members. Thus, the quality of the exchange relationship indicates the effectiveness of the members' working relationships within the peer group. To understand the potential consequences of team-member exchange, it is first necessary to address aspects of team-member exchange itself. The originators of the construct posit that individual team members pool their perceptions of exchanges across the group (Seers et al., 1995). This combination of perceptions results in individuals developing a perception of the quality of exchange across the group as a whole in contrast to perceptions formed

regarding the quality of exchange with specific individual coworkers. This coalescence of perceptions may be essential to establishing a group identity in addition to providing meaning to the members about their roles within the group.

Over time, group members would be expected to move toward agreement in their team-member exchange perceptions. Within-group agreement is a necessary condition for asserting that team-member exchange can function as a contextual variable (Klein et al., 1999). To date, however, no research has properly assessed team-member exchange at a group level. In an empirical study, Seers et al. (1995) used the work group's average score on the team-member exchange scale as reflective of the group level. In their study, the homogeneity requirement of group members' team-member exchange perceptions was not formally tested. Thus, it is unclear whether there was sufficient agreement among the group members on their perceptions of team-member exchange. Klein, Dansereau, and Hall (1994) have stated that unless there is sufficient homogeneity of responses among group members, aggregating their perceptions may not be warranted.

The social information processing approach suggests how and why group members would agree in their perceptions of the team-member exchange. It is through social interaction that individuals in work units adjust their attitudes and behaviors to take into account the context within which they work (Salancik & Pfeffer, 1978; Thomas & Griffin, 1989). Social interaction entails how group members behave and react to each other regarding exchanging information, expressing feelings, etc. It includes asking for information, providing suggestions, showing support for the group or one of its members, and showing affection (Guzzo & Shea, 1992). Through

social interactions, individuals in an organization come to share similar perceptions of or assign comparable meanings to the organizational context (Schneider & Reichers, 1983). Because members of the same work unit are more likely to interact with each other than with individuals outside their group, they are more likely to agree about their perceptions.

Klein, Conn, Smith, and Sorra (2001) have shown that social interaction among work unit members fosters within-group agreement in perceptions about the work environment. It is proposed here that social interaction is crucial to an individual's perception of the team-member exchange quality. It is through such interaction that group members experience and perceive the extent to which ideas, feedback, assistance, and recognition are exchanged between group members. If such shared exchanges are common in the group, it is expected that group members will come to develop similar perceptions of team-member exchange quality.

Hypothesis 1: There will be homogeneity of perceptions regarding team-member exchange within the group.

Previous research has supported the positive relationship between team-member exchange and performance (Seers, 1989) and job satisfaction (Major, Kozlowski, Chao, & Gardner, 1995; Seers, 1989; Seers et al., 1995), but has not investigated this relationship in an incremental sense in connection with leader-member exchange effects. No studies could be found that assessed the relationship between team-member exchange and organizational citizenship behavior or fairness. It will be argued here that team-member exchange significantly affects an individual's performance, organizational citizenship behavior, fairness perceptions, and job

satisfaction. The manner in which this occurs for each of these consequences will be discussed later in this study.

Trust Context

The second contextual variable to be examined in this study is labeled trust context. In recent years, organizational behavior researchers have taken an interest in the study of trust. It has been recognized that trust occurs inherently within the context of relationships with other individuals. Depending on the field of study, trust has been examined in several ways (Rousseau et al., 1998). For example, psychologists generally examine trust by focusing on internal cognitions and attributes of trustors and trustees, whereas sociologists investigate trust by considering interconnections between individuals and institutions or other broad entities (e.g., social class, government). The current study takes a meso-level perspective on trust, focusing on the nature of relationships between supervisors and the subordinates and how these are affected by the level of trust within work units as a whole (see Jones & George, 1998; Whitener et al., 1998). Trust context is being defined as the overall level of trust that work group members have for their supervisor. It has been suggested that supervisory behavior is an important influence on the development of trust in relationships with subordinates (Whitener et al., 1998). In turn, trust may have significant relationships with organizational outcome variables, such as performance (Earley, 1986), organizational citizenship behavior (McAllister, 1995), fairness (Konovsky & Pugh, 1993), and job satisfaction (Rich, 1997).

The overarching development of trust can be described by social exchange theory (Blau, 1964) which assumes that trust arises through the repeated exchange of

benefits between two individuals. Social exchanges are based on informal assurances that gestures of goodwill and mutual support will be reciprocated at a future time, while economic exchanges are more contract-based and require specific compensation for performing a task (Noorderhaven, 1992). As there is no formal guarantee of reciprocation in social exchanges, trust develops over time as the two individuals demonstrate that they are trustworthy.

In accordance with the social information processing perspective, it appears plausible that as individual group members take in informational cues by watching the interactions and exchanges between the manager and other group members, each will develop a perspective on the level of trust that exists between the manager and the group as a whole. It is through social interaction that group members experience and learn the extent to which trust between individual group members and the manager exists. If trust (or a lack thereof) in interactions between group members and the supervisor is common in the group, it is expected that most group members will tend to become similar in their perceptions. For example, as employees observe managers interacting with their coworkers, displaying behavioral consistency in integrity, delegation, communication, and concern, they will perceive the manager as trustworthy to some particular degree (Whitener et al., 1998).

A study by Sias and Jablin (1995) on differentiated leader-member exchange relationships lends empirical support to the idea of social information processing's role in the formation of trust contexts. In a high quality exchange relationship, there is mutual trust, respect, liking, and reciprocal influence, while in a low quality exchange, the relationship is characterized by downward influence and role-defined relationships

(Dansereau et al., 1975). Sias and Jablin (1995) found that members who had a low quality leader-member exchange relationship with their manager discussed more incidents of the leader's differential treatment when conversing with their coworkers. The differential treatment was discussed between coworkers mainly for the purpose of making sense of the group environment or context, echoing basic tenets of social information processing. Because of social information processing dynamics, unit members should be expected to move toward agreement in their trust perceptions. And thus, it is reasonable to assume trust contexts may develop within work groups.

Hypothesis 2: There will be homogeneity in perceptions regarding trust between the manager and the group as a whole.

Previous research has supported the positive relationship between individual trust and performance (Earley, 1986; Korsgaard, Schweiger, & Sapienza, 1995), organizational citizenship behavior (Axelrod, 1984; Mayer, Davis, & Schoorman, 1995; McAllister, 1995), fairness perceptions (Konovsky & Pugh, 1993; Lind, 1995; Tyler, 1989), and job satisfaction (Liou, Sylvia, & Brunk, 1990; Podsakoff, MacKenzie, & Bommer, 1996; Rich, 1997), but not in an incremental sense in connection with leader-member exchange effects. It is being argued here that trust context will predict incremental variance in performance, organizational citizenship behavior, fairness, and job satisfaction. These specific effects will be discussed in further detail below.

Individual Level Considerations: Relationship of Leader-Member Exchange with Performance, Organizational Citizenship Behavior, Fairness, and Job Satisfaction

Leader-Member Exchange

It is prudent to also consider exchange-relevant individual level variables when researching the potential cross-level effects of team-member exchange and trust context on individual outcome variables. This should be done to assess whether the contextual variable is indeed explaining information above and beyond what can be accounted for simply by individual level dynamics. As indicated above, leader-member exchange is the construct most studied in this regard. Since its introduction in the early 1970s, leader-member exchange has received substantial attention (see Graen & Uhl-Bien, 1995; Liden et al., 1997 for reviews). The premise behind leader-member exchange is that leaders differentiate between subordinates in their work group (Dansereau et al., 1975) and that this differentiation affects leaders' and subordinates' attitudes and behaviors toward one another.

Leader-member exchange research can be traced to the Vertical Dyad Linkage (VDL) model proposed by Dansereau et al. (1975). They documented that leaders develop differentiated relationships with their subordinates which was in contrast to the prevailing idea that leaders used an average leadership style whereby researchers measured the behavior of the supervisor on average or toward subordinates in general. Two major types of exchanges have been delineated. Low quality leader-member exchange (or out-group) relationships are characterized as exchanges between the supervisor and subordinate that are, for the most part, defined in the employment contract. High quality (or in-group) leader-member exchange relationships, in

contrast, include exchanges of material and non-material goods beyond those identified in the employment contract. Much of the leader-member exchange research has assessed the nature of the differentiated relationships and their effect on various outcomes (Liden et al., 1997). Over the past decade, researchers have examined various antecedents of leader-member exchange and how these differentiated relationships develop.

Given the accumulation of more than two decades of research on leader-member exchange, various reviews of the area have attempted to evaluate the state of leader-member exchange theory and research. Graen and Uhl-Bien (1995) examined the evolution of leader-member exchange by compartmentalizing the theory and research in the area into several stages.

Stage 1 in the development of leader-member exchange theory and research was the discovery of differentiated dyads (Graen & Uhl-Bien, 1995). Briefly, differentiated dyads come about through a process of role taking, role making, and role routinization (Graen & Scandura, 1987). In the role taking phase, the manager assesses the skills and motivation of subordinates by asking them to take on certain assignments. The subordinate then responds to the request in some manner, after which the manager evaluates the behavior to decide whether to provide the subordinate with additional assignments. In the role making phase, through working on unstructured tasks the manager and subordinate determine how they are interdependent upon each other. Finally, during role routinization, the relationship between the manager and subordinate becomes crystallized. In contrast to the predominant assumptions of the study of leadership that there was an average

leadership style, research on leader-member exchange ascertained that managers developed differentiated relationships with their direct reports (e.g., Graen, 1976; Graen, Novak, & Sommerkamp, 1982; Graen & Schiemann, 1978).

Stage 2 validated the differentiated relationships for organizational outcomes (Graen & Uhl-Bien, 1995). Work in this stage falls into two areas. The first area includes empirical research that assesses the characteristics of the leader-member exchange relationship (e.g., Graen & Scandura, 1987; Graen, Scandura, & Graen, 1986; Liden & Mitchell, 1989) and the second area contains research that examines the outcomes associated with leader-member exchange (e.g., Graen et al., 1982; Vecchio & Gobdel, 1984; Kozlowski & Doherty, 1989). Overall, these findings found further evidence of the existence of differentiated dyadic relationships in addition to describing how such relationships developed.

The explication of dyadic partnership building comprises Stage 3 (Graen & Uhl-Bien, 1995). In response to the findings in Stage 2, recent research on leader-member exchange addressed specific aspects of the development of leader-member exchange. In other words, research focused on how leaders create partnerships with their subordinates (e.g., Graen & Scandura, 1987; Graen et al., 1986; Scandura & Graen, 1984). While Stage 2 was descriptive in nature, Stage 3 focuses on a more prescriptive model of relationship development. Because exchange relationships are beneficial for managers, employees, and the organization, Graen and Uhl-Bien (1995) suggested that managers should be trained in building high quality relationships with all their subordinates.

In Stage 4, it is proposed that leader-member exchange be expanded to group and network levels (Graen & Uhl-Bien, 1995). Research has focused on assessing leader-member exchange as dyads within groups or as independent dyads, but this does not completely exemplify the nature of leader-member relationships in complex organizations. Such relationships exist within the context of the work unit in which it resides. It is recommended that leader-member exchange be studied within the context of the work unit (Cogliser, 1996; Graen & Uhl-Bien, 1995).

Leader-Member Exchange and Performance. In most studies assessing the relationship between leader-member exchange and supervisory performance ratings, the relationship has been positive (e.g. see, Duarte, Goodson, & Klich, 1994; Dunegan, Duchon, & Taber, 1992; Gerstner & Day, 1997; Keller & Dansereau, 1995; Klein & Kim, 1998; Scandura & Schriesheim, 1994; Seers & Graen, 1994; Wayne, Shore, & Liden, 1997). In a meta-analysis of leader-member exchange, Gerstner and Day (1997) found that leader-member exchange is positively related to performance ratings. Using structural equation modeling, Wayne et al. (1997) found that leader-member exchange was significantly and directly related to performance. They explained the result in terms of a social exchange perspective whereby employees help a supervisor by performing required job activities well. Employees may view job performance as an obligation to their supervisor, so when there is a positive relationship with the supervisor, employees are more likely to fulfill role requirements.

Hypothesis 3: Leader-member exchange will be positively associated with individual performance.

Leader-Member Exchange and Organizational Citizenship Behavior. The relationship between leader-member exchange and other work behaviors has also been addressed in the literature. One work behavior particularly salient in connection with leader-member exchange is organizational citizenship behavior (Anderson & Williams, 1996; Liden & Graen, 1980; Settoon, Bennett, & Liden, 1996; Tansky, 1993; Wayne & Green, 1993). As originally defined, organizational citizenship behavior comprised individual behaviors that are discretionary, not explicitly recognized by the formal organizational reward system, and as a whole contribute to the effective functioning of the organization (Organ, 1988). More recent formulations of organizational citizenship behavior have de-emphasized the discretionary and non-reward elements of Organ's original position (see Organ, 1997), but still recognize that citizenship behavior involves choice behavior that supports the technical or core tasks of the organization. Over the past several years, research interest in organizational citizenship behavior has increased substantially (Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

A recent review of the OCB literature indicated that approximately 30 different forms of OCBs have been identified (Podsakoff et al., 2000). The authors reduced the 30 conceptualizations to seven dimensions. Two of the seven dimensions, helping behavior and organizational compliance, are encompassed in Williams and Anderson's (1991) Organizational Citizenship Behavior-Individual (OCBI) and Organizational Citizenship Behavior-Organization (OCBO). Van Dyne, Cummings, and Parks (1995) stated that this delineation provides a useful distinction among the various organizational citizenship behavior operationalizations. OCBI was selected

for this study because it measures helping behaviors that specifically benefit individuals in the form of coworkers and the supervisor. Leader-member exchange and team-member exchange measure the exchange relationships between the supervisor and one's coworkers. OCBO was selected for this study because it measures behaviors that benefit the organization as a whole or impact the supervisor indirectly, again related to leader-member exchange.

Organizational citizenship behavior has been examined in connection with leader-member exchange because citizenship behaviors may be used by employees as a way to exchange with their supervisors and coworkers. A recent meta-analysis indicated that leader-member exchange has been positively correlated with OCBI (Podsakoff et al., 2000). Elsewhere, Settoon et al. (1996) found leader-member exchange to be positively related to citizenship behaviors directed at the supervisor and coworkers. As leader-member exchange quality improves, supervisors provide subordinates with valued benefits such as influence and support. This supervisory assistance creates an obligation on the part of the employee to reciprocate. By helping the supervisor or assisting coworkers on tasks that benefit the supervisor by creating a high-performing department, the subordinate directly reciprocates the benefits received from the supervisor. A review of the literature found one study which examined the relationship between leader-member exchange and OCBO; while not a focal relationship in the study, Masterson, Lewis, Goldman, and Taylor (2000) found a significant positive correlation between the two.

Social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) have been used to explain the relationship between leader-member exchange

and organizational citizenship behavior. Social exchanges are based on trust and tacit obligations. One party in the exchange relationship may perform a service for the other party in the relationship without a defined reward or outcome for the action. However, performing the service creates an indebtedness on the part of the other member. An important component of social exchange theory is the norm of reciprocity (Gouldner, 1960). This concept suggests that when the supervisor engages in helping behavior toward employees, they incur a relational responsibility to repay the supervisor so that the exchange is mutually advantageous. Organizational citizenship behaviors are ones that subordinates may use to reciprocate since such behaviors can contribute to the department's efficiency and effectiveness, thus helping the supervisor. Such behaviors are important wares for exchange because they are not explicitly required or rewarded by the organization, but are behaviors that employees voluntarily display.

Hypothesis 4a: Leader-member exchange will be positively associated with OCBI.

Hypothesis 4b: Leader-member exchange will be positively associated with OCBO.

Leader-Member Exchange and Fairness. There has been little attention paid to the issue of fairness in relation to leader-member exchange, although recently researchers have begun to examine the relationship (Mansour-Cole & Scott, 1998; Naumann, 1998; Scandura, 1999; Tansky, 1993). Mansour-Cole and Scott (1998) studied layoff survivor fairness perceptions. While not the focal relationships under study, it was found that leader-member exchange was

significantly positively related to both procedural and distributive fairness of the supervisor. In her dissertation, Naumann (1998) found that bank branch employees' perceptions of the leader-member exchange relationship were positively related to subordinates' perceptions of procedural justice. Having a good relationship with one's supervisor encouraged the perception of procedural fairness.

As previously noted, a basic tenet of leader-member exchange theory is the idea that managers develop differentiated relationships with subordinates, resulting in high or low quality exchanges. A high quality exchange relationship is characterized by mutual trust, respect, liking, and reciprocal influence, while a low quality exchange relationship is typified by downward influence and role-defined relationships (Dansereau et al., 1975). These differentiated relationships have been found to influence interpersonal exchanges between supervisors and their subordinates (Graen et al., 1982). In particular, group members that have a high quality relationship receive more support and attention from their supervisor than those subordinates with a low quality exchange relationship. It is plausible that low quality exchange subordinates might see the difference in the interpersonal relationships as unfair. In fact, Sias and Jablin (1995) found that subordinates with a low quality exchange relationship with the supervisor were more likely to discuss perceived unfair incidents with other work group members.

Hypothesis 5: Leader-member exchange will be positively associated with perceptions of fairness shown by the supervisor.

Leader-Member Exchange and Job Satisfaction. The relationship between leader-member exchange and a variety of work attitudes has been widely assessed in the leader-member exchange literature. One such work attitude that has long been found to be positively associated with leader-member exchange is job satisfaction (Graen et al., 1982; Major et al., 1995; Schriesheim, Neder, Scandura, & Tepper, 1992; Tansky, 1993; Wilhelm, Herd, & Steiner, 1993). In a study of government employees, Graen et al. (1982) found that training supervisors in improving the leader-member exchange led to gains in employee-rated job satisfaction. In a study of supervisory-subordinate dyads in a manufacturing organization, Wilhelm et al. (1993) found that leader-member exchange quality was highly positively related to subordinate job satisfaction. In high quality leader-member exchanges, the supervisor and subordinate establish a working relationship characterized by social acceptance from the supervisor and the collaboration on unstructured tasks with the subordinate. This results in the subordinate being instrumental in developing their position and this involvement results in greater satisfaction with the job.

Hypothesis 6: Leader-member exchange will be positively associated with subordinate perceptions of job satisfaction.

Cross-Level Considerations: Team-Member Exchange And Trust Context

In assessing the cross-level considerations, the remaining hypotheses posit that the team-member exchange and trust context will predict incremental variance in the outcome variables beyond that explained by leader-member exchange. The small groups literature provides some arguments for why it should be expected that the contextual variables would explain incremental variance. Social information

processing tenets suggest that individuals' perceptions of the work environment are affected just as much by social factors, such as cues from coworkers, as by their own individual judgments (Salancik & Pfeffer, 1978). Individuals comprehend that relying only on their own perceptions of the work context will provide them with an incomplete and possibly inaccurate view. Therefore, they look to their coworkers to assess others' perceptions of the work context (Hackman, 1992). Often, individuals believe that coworkers have more knowledge about the work environment. Some group members are, in turn, motivated to share information concerning aspects of the work context with their coworkers.

Aspects of the work environment that are most likely to be communicated and experienced within a group include interactions with one's coworkers, suggesting the importance of team-member exchange, and continuing interactions with the group's supervisor, indicating the level of trust. "Group and interpersonal relationships powerfully affect how people think, feel, and act at work" (Hackman, 1992, p. 199). It is expected that this effect will lead to the contextual variables explaining incremental variance in the outcome variables beyond that of the individual perception of leader-member exchange.

It is anticipated that leader-member exchange and the contextual variables, team-member exchange and trust context, will have positive relationships with the outcome variables and will likely explain overlapping variance because of their relational underpinnings. Given however, that the focal relationships are at different levels of analysis, it is not expected that their overlap will be identical. Generally, it is expected that cross-level effects will not be as strong as effects at the same level. The

contextual level variables, team-member exchange and trust context, can be construed as ambient stimuli (Hackman, 1992). Thus, they are capable of having an effect on the outcome variables, but not as direct an effect as leader-member exchange. The effect of the exchange relationship with the supervisor will be more direct with regard to an individual's performance, organizational citizenship behavior, fairness perceptions, and job satisfaction than will the effect of the work unit context (team-member exchange and trust context) that would be expected to be more diffuse.

Team-Member Exchange Relations with Performance, Organizational Citizenship Behavior, Fairness, and Job Satisfaction

Previous research has supported the positive relationship between individual level team-member exchange and performance (Seers, 1989) and job satisfaction (Major et al., 1995; Seers, 1989; Seers et al., 1995). The relationship between team-member exchange and organizational citizenship behavior and fairness has yet to be empirically assessed, but arguments are presented below to support the expectation of a positive relationship. It is argued that team-member exchange will predict incremental variance to these outcome variables.

Before considering specific cross-level hypotheses, it is instructive to contrast team-member exchange and leader-member exchange constructs, as there are broad similarities between the two (Seers, 1989). Both constructs are based on the view that relationships, in contrast to the position held by individuals, are the foundation of organizational structure. Both also focus on the reciprocal exchanges in a relationship rather than on the attributes or behavioral styles of either party. Reciprocity in both team-member and leader-member exchanges are assessed in terms of the resources

each individual brings to the exchange process. However, leader-member exchange examines the employee role making and managerial leadership, while team-member exchange addresses employee role making and group dynamics. Leader-member exchange occurs only between two individuals, a subordinate and manager, whereas team-member exchange measures role episode exchanges across coworkers within a work group.

Team-Member Exchange and Performance. There is only one study to date assessing the relationship between team-member exchange and performance. Seers (1989) found a positive relationship between the two variables such that higher team-member exchange predicted higher performance. Seers (1989) explained the result relying on the notion of an exchange relationship. Traditionally, supervisors are thought of as role senders, but employees spend more time interacting with their peers who must be recognized as role senders as well. When there are high quality exchanges between team members, members are provided with more opportunity to meet the performance expectations of the work unit role senders. In addition, reciprocal behavior may facilitate the coordination of members' efforts, leading to better performance (Seers et al., 1995).

The literature on work groups also provides evidence that aspects of team-member exchange will affect performance. Campion, Papper, and Medsker (1996) found that a variety of work group characteristics exhibited a positive relationship with manager-assessed effectiveness. In particular, interdependent feedback, communication and cooperation within the group, workload sharing, and social support, all indicators of team-member exchange, were all positively associated with

group effectiveness. In addition, Campion, Medsker, and Higgs (1993) also found that workload sharing and communication and cooperation within groups were positively correlated with managerial assessments of group effectiveness.

Another area of literature that supports a relationship between team-member exchange and performance is that pertaining to work group cohesiveness. Although there are some similarities between the two concepts, team-member exchange and cohesiveness are different at their core. Cohesiveness involves the perception of the group as an undifferentiated whole, while team-member exchange quality involves the perception of one's role within the group and the quality of interactions with individual members. However, if the perceptions of team-member exchange quality are uniformly high within a group, it is presumed that group members will perceive the group to be cohesive (Seers, 1989). In fact, research supporting this supposition shows that team-member exchange quality and work group cohesiveness may be positively correlated (Seers, 1989; Seers et al., 1995).

Recent empirical work, including a meta-analysis performed by Mullen and Copper (1994) supports the belief that task-oriented components of cohesiveness correlate with performance. Indirect support for this notion was found in a study in which members of cohesive groups were committed to more difficult task goals which, in turn, led to higher performance (Klein & Mulvey, 1995). Researchers have suggested that socially-oriented processes associated with cohesiveness may also explain its relationship with performance. Increased interpersonal attraction accompanies group cohesiveness. This attraction allows group processes related to performance, such as group communication and information sharing, to occur more

freely and may make a difference in performance especially when task interdependence is high (Gully, Devine, & Whitney, 1995). Of course, because cohesiveness is not the same as team-member exchange, only indirect support is offered by this research.

Recalling from earlier in this chapter, leader-member exchange should be related to performance. There is also evidence that team-member exchange is associated with individuals' performance. With regard to cross-level effects, it is expected that team-member exchange will predict incremental variance in performance beyond that explained by leader-member exchange.

Hypothesis 7: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of individual performance than would be expected based on their individual levels of leader-member exchange.

Team-Member Exchange and Organizational Citizenship Behavior. The relationship of team-member exchange and organizational citizenship behavior has not been examined in the literature. The literature on social exchange (Blau, 1964) and the norm of reciprocity (Gouldner, 1960) that describes the relationship between leader-member exchange and organizational citizenship behavior can be used to understand the likely relationship between team-member exchange and organizational citizenship behavior. As noted above, to some extent social exchanges are based on trust and implied obligations. One party in the exchange relationship may perform a service for the other party in the relationship without a defined reward or outcome for the action. However, performing the service creates an obligation for the other member to reciprocate at a later time. When a coworker engages in helping behavior

toward a work group member, such as making suggestions about better work methods and finishing work that has been assigned to others, the group member incurs an informal responsibility to repay the coworker so that the exchange is mutually advantageous (Blau, 1964). Organizational citizenship behaviors, generally, and OCBI, in particular, are behaviors that employees may use to reciprocate as such behaviors include helping coworkers with an organizationally relevant task or problem and likely contribute to coworkers' efficiency and effectiveness. Unlike trust context which is proposed to affect both OCBI and OCBO (see page 36), team-member exchange is posited to affect only OCBI because such helping behaviors arising out of the team-member exchange directly affect group members whereas OCBO is directed at the organization. OCBO would not be used to reciprocate helping behaviors from group members because such behaviors are less likely to be perceived by fellow work unit members as helpful to them.

In addition, the idea of relational contracts (MacNeil, 1985; Rousseau, 1990) supports the notions that relational exchanges take place with a variety of organizational members including work group members and that team-member exchanges will result in organizational citizenship behavior. Unlike transactional contracts (Keeley, 1988) that specify the terms of rights and obligations between the parties, relational contracts are composed of subjectively defined agreement terms that emerge in patterns of accommodation. These types of contracts afford the flexibility that is needed in the changing group environment; relational contracts can be redefined, reinterpreted, and reassessed as needed.

As noted, leader-member exchange should be related to organizational citizenship behavior. Regarding cross-level effects, it is expected that team-member exchange will predict incremental variance in organizational citizenship behavior directed at coworkers (OCBI) beyond that explained by leader-member exchange.

Hypothesis 8: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of organizational citizenship behavior than would be expected based on their individual levels of leader-member exchange.

Team-Member Exchange and Fairness. The relationship of team-member exchange and perceptions of fairness within the work group has not been examined in the literature. One can look to the leader-member exchange, fairness, and small groups literatures to begin to understand why team-member exchange should be positively associated with employees' perceptions of supervisor fairness.

According to social identity theory, when individuals join groups, they view the selected group as superior to others partly because they are motivated to improve their own self-image (Tajfel, 1981). After joining a group, individuals develop perceptions that the group merits being treated fairly (Brown, 1986). Just as individuals are motivated to enhance their self-image, they are similarly motivated to have an augmented social identity. Therefore, it follows that fair treatment of the group would be viewed as just as important to other group members as fair treatment of the individual.

Tyler and Lind (1992) have proposed that a fairness violation against one work unit member may be interpreted as a violation against the entire group. It may be argued that such a violation would be more likely to be interpreted as violating the

whole group if the group was one exhibiting a high level of team-member exchange, because in such groups members would tend to identify more strongly with each other. Therefore, it is reasonable to expect that team-member exchange quality will be positively associated with perceptions of the leader's fairness as group members discuss with each other various incidents of fairness on the part of the supervisor.

As noted earlier in this chapter, leader-member exchange should be related to perceptions of fairness of the supervisor. With respect to cross-level effects, it is expected that team-member exchange will predict incremental variance in fairness beyond that explained by leader-member exchange.

Hypothesis 9: Individuals in works groups with high quality team-member exchange will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange.

Team-Member Exchange and Job Satisfaction. A few studies have examined the relationship between team-member exchange and job satisfaction. These studies have found a positive association between the two variables (Major et al., 1995; Seers, 1989; Seers et al., 1995). Given that team-member exchange assesses the quality of the exchange between group members, it is not surprising that it should be positively related to job satisfaction. A high quality exchange suggests that group members would be prone to suggestions about better work methods, communicate regarding when coworkers do things that make others' jobs easier, switch responsibilities to facilitate flexibility for group members, etc. Thus, a team with high quality exchanges

among group members is more likely to facilitate the work being performed and, hence, job satisfaction.

The literature on work group cohesiveness also supports a relationship between team-member exchange and job satisfaction. O'Reilly and Caldwell (1985) found a significant, positive relationship between cohesiveness and job satisfaction. In cohesive groups, behavioral norms are likely to be developed that provide a support system to work group members (Hackman, 1992) which, in turn, should reduce role strain. Also, cohesive groups can provide emotional support for group members and be a direct source of satisfaction (Lott & Lott, 1965).

As previously discussed, leader-member exchange should be related to job satisfaction. In reference to cross-level effects, it is expected that team-member exchange will predict incremental variance in job satisfaction beyond that explained by leader-member exchange.

Hypothesis 10: Individuals in work groups with high quality team-member exchange will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange.

Trust Context Relations with Performance, Organizational Citizenship Behavior, Fairness, and Job Satisfaction

As with team-member exchange and leader-member exchange, it is worthwhile to compare trust context and leader-member exchange before offering pertinent cross-level hypotheses. It has been recognized that trust is an element of the leader-member exchange relationship (Graen & Uhl-Bien, 1995); high quality exchanges exhibit, among others things, mutual trust. However, trust is only one of several elements

operating in leader-member exchanges. Also, leader-member exchange focuses attention on the work relationship between the supervisor and subordinate. Trust in one's supervisor, however, is broader than the work relationship. It includes an emotional bond between people that expresses genuine care and concern for the parties involved (McAllister, 1995). It also taps dimensions of behavioral integrity and demonstrations of benevolence across situations and time (Whitener et al., 1998).

Trust Context and Performance. Research has shown that trust has a significant positive relationship with performance (Earley, 1986; Korsgaard et al., 1995). In two studies, Earley (1986) found positive correlations between trust and performance in manufacturing workers in both the United States and England. In particular, the studies examined how feedback affected individuals' performance and found that subordinates' trust that the supervisor would provide the feedback partially mediated the effect of feedback on performance. Trust in these studies was assessed at the individual level.

It is expected that trust context will explain some incremental variance in performance beyond that explained by leader-member exchange. As the relationship between a manager and subordinate develops and exchanges of benefits and resources occur, the parties demonstrate their level of trustworthiness to each other (Mayer et al., 1995; Whitener et al., 1998). Social exchange theory and social information processing model both indicate that together through social interactions, individuals partly define the social situation. It is plausible that as group members interact with each other, they will develop and negotiate a definition of the level of trust that exists between the supervisor and the group as a whole. In other words, as group members

communicate with coworkers about their trust encounters with the supervisor, the group will come to an agreed upon perception of the level of trust that the supervisor has with the group as a whole. In a trust context, the supervisor is an important source of feedback and subordinates will accept the trusted supervisor's feedback, which should lead to improved performance on the part of the individual (Earley, 1986).

Recalling from earlier in this chapter, leader-member exchange should be related to performance. With regard to cross-level effects, it is expected that trust context will predict incremental variance in performance beyond that explained by leader-member exchange.

Hypothesis 11: Individuals in work groups with a high level of trust context will exhibit higher levels of performance than would be expected based on their individual levels of leader-member exchange.

Trust Context and Organizational Citizenship Behavior. It is recognized that trust can lead to cooperative behavior in organizations (Axelrod, 1984; Jones & George, 1998; Mayer et al., 1995; McAllister, 1995). According to Jones and George (1998), at a minimum, shared favorable attitudes will support the likelihood of future interactions and promote many of the cooperative exchanges that take place in organizations. In the best case scenario where shared values create a common connection between work unit members, what one coworker does is determined by what others are doing because group members are attentive to what their coworkers are doing in order to respond appropriately. When trust exists in a group, members will cooperate to maintain their positive status within the group. Cooperating with

others tends to make people feel good and encourages others to behave similarly.

Organizational citizenship behavior can be encouraged by increasing the level of cooperation in organizations (Organ & Ryan, 1995; Van Dyne et al. 1995). It has been found that trust is positively related to citizenship behaviors, both OCBO and OCBI (Dirks & Ferrin, 2000; Podsakoff et al., 1996; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Citizenship behaviors can result from an employee's desire to assist the supervisor in meeting his or her personal goals and objectives and to express one's trust in a tangible manner. Trust in the supervisor may manifest itself through both OCBO as well as OCBI because supervisors tend to be viewed symbolically as the immediate representative of the organization. Therefore, if employees trust their supervisors, they are more likely to display both OCBI which directly help the supervisor and OCBOs which, albeit indirectly, still may represent citizenship toward the supervisor. Again, trust in these studies was assessed at the individual level.

It is plausible that trust context will explain incremental variance in organizational citizenship behavior. As noted above, Hackman (1992) states that stimuli experienced in a group setting can affect the behavior of individual group members. This influence can occur directly when behaviors are rewarded or punished or indirectly by affecting what the person thinks or feels. Although organizational citizenship behavior is not formally recognized by the organization's reward system, over time such behaviors can influence employee salary increases, bonuses, and/or career opportunities. In groups where there is a positive trust context, individuals may

perceive that citizenship behaviors will ultimately be recognized by the supervisor; evidence exists to support this perception (Organ, 1997). This overall level of trust is critical because organizational citizenship behavior is not formally recognized in policies and procedures. If employees can generally assume they will be recognized in some fashion for exhibiting organizational citizenship behaviors, they will be more likely to do so.

As previously noted, leader-member exchange should be related to both OCBO and OCBI. With respect to cross-level effects, it is expected that trust context will predict incremental variance in both types of organizational citizenship behavior beyond that explained by leader-member exchange.

Hypothesis 12a: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBO than would be expected based on their individual levels of leader-member exchange.

Hypothesis 12b: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBI than would be expected based on their individual levels of leader-member exchange.

Trust Context and Fairness. Previous studies have found a positive relationship between individual level trust and perceived fairness (Konovsky & Pugh, 1993; Lind, 1995; Tyler, 1989; Tyler, 1994). In an empirical study, Konovsky and Pugh (1993) found a strong positive correlation between subordinates' perceptions of their supervisor's fairness and their trust in the supervisor. Tyler (1989) and Lind (1995) both note that fairness judgments are denoted by three types of relational judgments about management. One of

these relational judgments includes trustworthiness. Trustworthiness involves assessments of the motives concerning managers' judgments about their benevolence and concern for the needs of those they deal with. In studying the effects of managers' behavior on subordinates' fairness evaluations, Tyler (1994) argued that if managers are regarded as trustworthy, then subordinates are willing to judge them as being fair.

It is expected that trust context will incrementally effect group members' fairness perceptions. Support for this expectation can be found in the communication literature. Some research indicates that perceptions of fairness are communicated between work unit members in order that they can make sense of their work environment (Sias, 1996; Sias & Jablin, 1995). These results are consistent with the expectations of social information processing. By sharing opinions, work group members move toward a consensual understanding of their work context. If individual members have witnessed evidence of the trustworthiness of the supervisor, through coworkers interacting and providing information to each other, a high trust context should emerge. On the other hand, if they have evidence of untrustworthy behavior by the supervisor, by the same token the context will be such that a lower level of trust will exist. In a high trust context, subordinates will perceive the supervisor as fair; the opposite should hold in a context of untrustworthiness.

Recalling from earlier in this chapter, leader-member exchange should be related to fairness. From a cross-level standpoint, it is expected that trust context will predict incremental variance in the perception of the fairness of the supervisor beyond that explained by leader-member exchange.

Hypothesis 13: Individuals in work groups with a high level of trust context will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange.

Trust Context and Job Satisfaction. Numerous studies have examined the relationship between trust and job satisfaction at the individual level of analysis. In general, studies find a positive relationship between the two variables (Butler, Cantrell, & Flick, 1999; Dirks & Ferrin, 2000; Liou et al., 1990; Podsakoff et al., 1996; Rich, 1997). In their study, Liou et al. (1990) examined the responses of 1,473 adults to a national survey and found that trust was a significant predictor of job satisfaction. When individuals trust their manager, cooperative behavior ensues which provides the subordinate the opportunity to have input into the design of the job that results in being satisfied with the job. In addition, a recent meta-analysis by Dirks and Ferrin (2000) found that trust in leadership was positively related to job satisfaction.

It is expected that trust context will have a similar effect on job satisfaction. Pressures on individuals from other group members provide indicators that will influence the individuals' attitudes. Indirect pressures such as social norms and the presence of others can influence satisfaction (Ferris & Mitchell, 1987). Through active social cues, group members can provide others with social information through verbal and nonverbal cues that communicates their feelings and evaluations of other individuals, events, processes, and situations occurring in the group. Active cues are understood by a focal individual as providing information about the attitude that is pertinent and expected. It is assumed here that social cues are emitted by group

members indicating their trust in the supervisor. In groups that are characterized by a high level of trust, there is likely to be a high level of employee input into matters pertaining directly to task accomplishment and the overall design of their jobs.

As already discussed, leader-member exchange should be related to job satisfaction. In relation to cross-level effects, it is expected that trust context will predict incremental variance in job satisfaction beyond that explained by leader-member exchange.

Hypothesis 14: Individuals in work groups with a high level of trust context will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange.

Summary

In summary, this chapter proposed that team-member exchange and trust context are expected to influence individual level performance, organizational citizenship behavior, job satisfaction, and perceptions of the fairness of the supervisor beyond the effects of individual level leader-member exchange. A summary of the hypotheses appears in Table 1.

Table 1

Summary of Hypotheses

Agreement hypotheses:

Hypothesis 1: There will be homogeneity of perceptions regarding team-member exchange within the group.

Hypothesis 2: There will be homogeneity of perceptions regarding trust between the manager and the group as a whole.

Leader-member exchange individual level hypotheses:

Hypothesis 3: Leader-member exchange will be positively associated with individual performance.

Hypothesis 4a: Leader-member exchange will be positively associated with OCBO.

Hypothesis 4b: Leader-member exchange will be positively associated with OCBI.

Hypothesis 5: Leader-member exchange will be positively associated with perceptions of fairness shown by the supervisor.

Hypothesis 6: Leader-member exchange will be positively associated with subordinate perceptions of job satisfaction.

Team-member exchange cross-level hypotheses:

Hypothesis 7: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of individual performance than would be expected based on their individual levels of leader-member exchange.

Table 1 (continued)

Hypothesis 8: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of organizational citizenship behavior than would be expected based on their individual levels of leader-member exchange.

Hypothesis 9: Individuals in works groups with high quality team-member exchange will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange.

Hypothesis 10: Individuals in work groups with high quality team-member exchange will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange.

Trust context cross-level hypotheses:

Hypothesis 11: Individuals in work groups with a high level of trust context will exhibit higher levels of performance than would be expected based on their individual levels of leader-member exchange.

Hypothesis 12a: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBO than would be expected based on their individual levels of leader-member exchange.

Hypothesis 12b: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBI than would be expected based on their individual levels of leader-member exchange.

Table 1 (continued)

Hypothesis 13: Individuals in work groups with a high level of trust context will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange.

Hypothesis 14: Individuals in work groups with a high level of trust context will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange.

Chapter 3: Method

Sample

Participants in the study were 77 groups consisting of 403 non-union employees and their 73 supervisors working at a bank located in the southeast and a manufacturing organization with locations in the southeast, southwest, midwest, and Canada. A wide variety of jobs were sampled in the bank including bank tellers and customer service representatives, and in the manufacturing organization, including assemblers, machinists, customer service representatives, engineers, and technicians. The response rate for employees was 97%; only one supervisor elected not to return her survey.

Between 4 and 11 employees from each of the 77 groups completed a survey. Across groups, 35.8% of the employees were between the ages of 17 and 30, 23% between the ages of 31 and 40, 23% between the ages of 41 and 50, and 18.2% were 51 or older. For supervisors, 13.3% were between the ages of 21 and 30, 23.8% between the ages of 31 and 40, 47.3% between the ages of 41 and 50, and 15.6% were 51 years of age or older. About 68% of the employees were high school graduates or had some college work, while 31% had college or higher degrees. Of the supervisors, 51% graduated from high school or had some college work and 49% had college degrees. Forty-eight percent of the employees were male and 61% of the supervisors were male. Regarding tenure, 17% of the employees had been with the organization less than one year, 32% had tenure between 1 and 5 years, and 51% of the respondents had been with their company for more than five years. For supervisors, 2.2% had

tenure less than one year, 15.4% had been with their organization between one and five years, while 82.4% had tenure of longer than five years.

Procedure

In order to identify supervisors and their work units, an upper level manager in each organization identified the supervisor and employees in the work unit.

Supervisors were notified by these managers that they were being asked to participate in a research study, and that it would entail employees meeting with the researcher for approximately 25 minutes to complete a survey. A sample letter sent from the banking organization's management announcing the research project can be found in Appendix A. The manufacturing firm announced the project verbally through telephone calls placed to the participating managers.

The supervisors were told they could complete their survey while the researcher was meeting with their employees or they could complete it within a week and return it via mail. In the bank, the researcher contacted each of the supervisors to schedule a meeting time. In the manufacturing organization, times were scheduled by the firm and the researcher flown in to collect the data. In both organizations, surveys were administered during working hours to collect the data. The majority of survey responses was collected by the author during group meetings. Supervisors did not remain in the room while the employees completed their surveys. In some instances, the surveys were distributed during group meetings and returned via mail.

Participation was voluntary and confidential. This was communicated to employees and supervisors in writing in the cover letter and reiterated verbally during the sessions prior to the surveys being completed.

Pretest

A pretest of the both the employee and supervisor surveys was conducted using a few groups to determine if the surveys were understandable and whether modifications to the surveys were necessary. Based on feedback from the participants, the format was modified slightly, one of the questions reworded, and the directions clarified for ease of understanding by both employees and supervisors.

Measures--Individual Level Variables

A five-point Likert-type response format was used for all measures, with items coded such that a low score indicates a greater amount of the focal construct. To obtain individuals' scores on the measures, items within each measure were averaged. The measures are discussed below. A complete listing of items comprising the scales appears in Appendix B. The employee and supervisor surveys appear in Appendices C and D.

Leader-member exchange.

The supervisors completed the LMX-7 (Scandura & Graen, 1984) to measure the perceptions of the quality of their exchange relationship. The scale was completed by the supervisor to minimize common method variance with the majority of study measures, which were collected from employees. It is acceptable practice in the literature to have supervisors complete the scale (Schriesheim et al., 1999). The LMX-7 is the most consistently used measure of the construct (Gerstner & Day, 1997; see Graen & Uhl-Bien (1995) and Schriesheim, Castro, & Cogliser (1999) for reviews). The scale had acceptable reliability ($\sigma = .78$), and is advocated by researchers in the area as the recommended measure of leader-member exchange

(Gerstner & Day, 1997; Graen & Uhl-Bien, 1995). Sample items include the following: “How well does your leader understand your job problems and needs?” and “How would you characterize your working relationship with your leader?”

Performance.

The supervisors completed five items to assess their subordinates' performance. The scale was created by combining features of the performance appraisals measuring in-role performance used in the two organizations that participated in the study. Managers from both organizations found the performance items appropriate to measure performance in their organizations. The scale was found to have acceptable reliability ($\alpha = .95$). The items address the quantity and quality of output, the efficiency of work, problem-solving capability, and adaptability/flexibility. The performance items were found to be relevant by managers from both the bank and manufacturing organizations.

Organizational citizenship behavior (OCB).

Employees assessed the extent to which they engaged in helping behavior directed toward the organization (OCBO) or other individual coworkers (OCBI). Employees completed the scales in order to reduce common method variance. It is acceptable practice to have employees complete the scales (Bettencourt, Gwinner, & Meuter, 2001; Conway, J. M., 1999). Seven items from Williams and Anderson's (1991) scale were used to measure each dimension. Again, OCBI was selected for this study because it measures helping behaviors that specifically benefit coworkers and the supervisor. Although it measures behaviors that benefit the organization as a whole, OCBO was selected for use in this study because it could be used indirectly as

a reward in exchange for supervisory benefits. The OCBI scale was found to have acceptable reliability ($\alpha = .77$). The OCBO scale had somewhat lower reliability ($\alpha = .65$), but was deemed acceptable for use in the study. Also, this measure has been shown to be reliable in other studies (Williams & Anderson, 1991). Sample OCBI items include the following: "I help others who have heavy workloads" and "I go out of my way to help new employees." Sample OCBO items include the following: "I conserve and protect organizational property" and "I take undeserved work breaks."

Overall job satisfaction.

The extent to which subordinates are satisfied and happy with their jobs was assessed using a five-item scale (Hackman & Oldham, 1975). It is a commonly used measure of overall job satisfaction. The scale had acceptable reliability ($\alpha = .77$). Sample items include the following: "Generally speaking, I am very satisfied with this job" and "I frequently think of quitting this job."

Fairness of the supervisor.

Ten items from the Perceptions of Fair Interpersonal Treatment Scale (Donovan, Drasgow, & Munson, 1998) were used to measure employees' perceptions of fairness in interacting with their manager. The scale measures employees' perceptions of the interpersonal treatment received from their supervisor in their daily work environment. In a study using more than 700 employees, the scale was found to be valid and reliable (Donovan et al., 1998). Their study indicated that employee perceptions of fairness in the work environment are important, given the significant relationships found with supervisory and work satisfaction. In the present study, the items had acceptable reliability ($\alpha = .91$). Sample items include: "Employees are

praised for good work,” “Supervisors play favorites,” “Employees are treated with respect,” and “Employees are lied to.”

Measures--Group Level Variables

According to Chan (1998), specifying the appropriate composition model is crucial for good multilevel research. Composition models define the relationships among the constructs at different levels of analysis that concern fundamentally the same content but that are qualitatively different (Rousseau, 1985). This study uses the referent-shift consensus composition model. Basically, the researcher starts with a construct at the lower level (e.g., individual level trust). Then, because the researcher is interested in individual employees' aggregate perception of trust in the supervisor, scale items are modified so that the appropriate unit (here the group) is the referent. The trust context measure was developed in this manner. Such rewording was not necessary for the team-member exchange scale as the work group was already the relevant referent.

Team-member exchange.

Employees completed the 10-item Team-Member Exchange Quality Scale (Seers et al., 1995). The scale measures the reciprocal exchange quality between a group member and the work group. A search of the literature uncovered no other scale designed specifically to measure the exchange relationship between work group members. Team-member exchange indicates the quality and effectiveness of an individual's working relationship to the work group. This scale had an acceptable level of reliability ($\alpha = .84$). Sample items are: “How often do you make suggestions

about better work methods to other team members?” and “How well do members of your team recognize your potential?”

Trust context.

To obtain a work group level measure of trust context, employees completed a 12-item measure of trust in the supervisor (McAllister, 1995) modified so that the work group was the referent. The scale measures perceptions of the level of interpersonal trust between the group as a whole and the work group’s supervisor. The scale had an acceptable level of reliability ($\alpha = .92$). Examples of items assessing trust in the supervisor includes “Overall, the group has a sharing relationship with our supervisor,” “The group together with our supervisor can freely share our ideas, feelings, and hopes,” and “Overall, the group feels that our supervisor approaches his/her job with professionalism and dedication.”

Chapter 4: Analyses and Results

Statistical Power

Hierarchical linear modeling (HLM) was used to test several of the hypotheses. Large sample sizes are believed to be required for HLM analyses in order to have adequate power (Bassiri, 1988). There are no clear guidelines, however, for determining precisely how large the sample should be. Bryk and Raudenbush (1992) draw on the ordinary least squares (OLS) requirement and suggest that an analogous rule for HLM be used. Therefore, 10 observations per predictor were targeted. The three cross-level predictors in this study would require a minimum sample of 30 groups with four to ten individuals comprising each work group. There may, however, be sample size tradeoffs among between- and within-group observations (Hofmann, 1997). For example, a large number of groups may offset a small number of observations per group and vice versa. In addition, the statistical power for detecting HLM Level-2 effects can be increased more by expanding the number of groups than by increasing the number of individuals per group (Bassiri, 1988). In contrast, the statistical power for detecting HLM Level-1 effects depends more on the total number of observations (Bassiri, 1988). Because the key hypotheses in this study concern Level-2 effects, it was more important to have a large number of work groups than to have a large number of individuals in each group. Although the initial target was 50 groups, I was able to collect data from a total of 77 groups.

Confirmatory Factor Analysis (CFA)

Because some of the individual level variables analyzed were collected from the same source and could be expected to intercorrelate, a confirmatory factor analysis

using LISREL 8.30 (S. du Toit, M. du Toit, Joreskog, & Sorbom, 1999) was conducted to assess whether the individual level scales were empirically distinct.

Even models with strong theoretical support are less likely to fit when there are more than thirty indicators (S. du Toit et al., 1999). Hence, 23 indicators (teslets) were constructed for use in the CFA rather than the 41 scale items. Using an approach called the “single-factor method” (Landis, Beal, & Tesluk, 2000), a reduced set of indicators was created for each latent variable. To start, separate factor analyses on the items from each scale were conducted. For each scale, indicators were created by pairing the highest-loading item with the lowest-loading item to form a new indicator, the next highest-loading item was added to the next lowest-loading item to form the next indicator, and so on. Through this process, leader-member exchange, OCBI, and OCBO were reduced from seven indicators to four, fairness was reduced from 10 to five, and performance and job satisfaction were reduced from five to three. In a simulation, Landis et al. (2000) found that the single-factor method was among the best methods for producing reduced sets of indicators.

The results of the CFA appear in Table 2. Along with the fit indices listed below, Table 2 includes χ^2 results that assess the magnitude of the discrepancy between the sample and fitted covariance matrices (Hu & Bentler, 1995). Three goodness-of-fit indices were utilized to determine the degree of fit: the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Use of the CFI was recommended by Medsker, Williams, and Holahan (1994) and Gerbing and Anderson (1993). The

Table 2

Confirmatory Factor Analysis on Individual Level Variables

	χ^2	<u>df</u>	<u>CFI</u>	<u>RMSEA</u>	<u>SRMR</u>
6 factor model	593.39***	215	.93	.07	.06
5 factor model	1893.48***	230	.74	.13	.19
1 factor model	5155.57***	230	.34	.23	.20

***p < .001.

RMSEA accounts for model parsimony in assessing fit (Browne & Cudeck, 1993).

Hu and Bentler (1999) recommend that the SRMR be used in conjunction with these other fit indices. In order to be confident that a good fit exists, the CFI should be greater than .90, the RMSEA less than .08, and the SRMR less than .10 (Vandenberg & Lance, 2000).

The fit indices demonstrated that the six factor measurement model provided a superior fit as compared with a five factor or single factor model. Since the one factor model is generally likely to provide a poor fit, it has been recommended that theoretically proposed measurement models should be compared to an alternative theoretically plausible model (Williams & Hazer, 1986). In response to this suggestion, the six factor model was compared to a five factor theoretically plausible model where the leader-member exchange indicators were set to load on the fairness latent variable. This particular model was chosen because leader-member exchange and fairness could be argued to overlap conceptually to an extent. The CFI for the six factor model was .93, compared to .34 for the one factor model and .74 for the five factor model; the RMSEA for the six factor model was .07, compared with .23 and .13 for the one factor and five factor models, respectively; the SRMR for the six factor model was .06 compared with .20 for the one factor model and .19 for the five factor model. These results taken as a whole provide support for treating the individual level variables as six distinct variables.

Tests of Hypotheses

Table 3 reports means, standard deviations, and intercorrelations of the study variables for descriptive purposes. Overall, with the exception of performance, the individual level variables are correlated with each other at low to moderate levels.

A descriptive summary of the multilevel analysis or hierarchical linear modeling (HLM) process now follows. As is explained in detail below, certain prerequisites must be satisfied to conduct multilevel analyses. First, it is necessary that there be systematic within- and between-group variance in the dependent variables (performance, OCBI, OCBO, fairness, and job satisfaction). This condition is necessary because the dependent variables are hypothesized to be significantly related to both an individual level variable (leader-member exchange) and group level variables (team-member exchange and trust context). This is assessed in HLM using a one-way analysis of variance. The null model partitions the variance into within- and between-group components and provides a statistical test of the between-group variance estimate (τ_{00}). Unless there is significant between-group variance in the dependent variables, team-member exchange and trust context would not have an opportunity to explain significant amounts of such variance.

Next, there should be significant between-group variance in the intercepts (β_{0j}) estimated in the Level-1 model and this is tested using a random coefficients regression model. The variance in the Level-1 intercept term (β_{0j}) represents the between-group variance in the dependent variables after controlling for leader-member exchange. Lastly, for the cross-level hypotheses to be supported, the between-group variance in the dependent variables must be predicted by team-member

Table 3

Descriptive Statistics for Individual Level Variables

	<u>Mean</u>	<u>SD</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
1. Leader-Member Exchange	2.18	.45	1.00					
2. Performance	2.50	.65	.52**	1.00				
3. OCBI	1.89	.50	.39**	-.04	1.00			
4. OCBO	1.79	.46	.18**	.08	.40**	1.00		
5. Fairness	2.14	.74	.16**	.04	.21**	.18**	1.00	
6. Job Satisfaction	2.40	.70	.15**	.10*	.32**	.32**	.39**	1.00

* $p < .05$. ** $p < .01$.

exchange and trust context. This is tested using intercepts-as-outcomes models assessing whether the variance in the intercepts from the within-group regressions is associated with the level of team-member exchange or trust context.

Within- and Between-Group Variance in Aggregate Variables--Tests of Hypotheses 1 and 2

Before conducting multilevel analyses, it must be established that there is agreement on the group level variables (team-member exchange and trust context) among group members within groups and that there is sufficient between-group variance for the same variables. There must be within-group agreement in order for the use of an aggregate measure of team-member exchange or trust context to be justified. There must be sufficient between-group variance in the Level-2 constructs so that they can account for between-group variance in the dependent variables. To test hypotheses 1 and 2 that group level perceptions are homogeneous (i.e., the extent to which group members agree and within-group variance is minimized), interrater agreement indices (r_{wg}) were computed for team-member exchange and trust context (James, Demaree, & Wolf, 1984, 1993). To test whether sufficient between-group variance exists to conduct a cross-level analysis, eta coefficients (η) were also computed for the context measures (James, 1982). Squaring eta coefficients provides an estimate of the variance explained between groups. Although there are no absolute standards concerning adequate levels of r_{wg} or eta squared, results were compared with those listed in other multilevel studies (e.g., Kidwell et al., 1997; Naumann & Bennett, 2000; Thomas, Shankster, & Mathieu, 1994; Wech et al., 1998).

Team-Member Exchange.

The median r_{wg} for the team-member exchange measure was .92, indicating there was more than sufficient within-group agreement. It has been suggested (e.g., George, 1990; Janz, Colquitt, & Noe, 1997) that aggregation is justified when the median agreement index is .70 or greater. Moreover, the results obtained here are comparable to those achieved in previous work group research (George, 1990; Naumann & Bennett, 1999; Wech et al., 1998). To consider between-group variation, I calculated η^2 from an analysis of variance with the work groups. The results indicated that by the η^2 standard, 34 percent of the variance ($\eta^2 = .34$, $F = 2.16$, $p < .000$) in team-member exchange lies between groups. Based on these results, I inferred that the use of the aggregate measure of team-member exchange was reasonable.

Trust in the Supervisor.

The median r_{wg} for the trust in the supervisor measure was .91, indicating there was more than sufficient within-group agreement. To consider between-group variation, I calculated η^2 from an analysis of variance with the work groups. The results indicated that 44 percent of the variance ($\eta^2 = .44$, $F = 3.16$, $p < .000$) in trust in the supervisor lies between groups. Based on these results, I inferred that the use of the aggregate measure of trust in the supervisor was reasonable.

Analyzing Cross-Level Data. There are basically three statistical techniques which can be used to analyze cross-level data. First, the data can be disaggregated by assigning each lower level unit a score representing the higher level unit within which it is nested (Hofmann, 1997). Limitations of this approach include the difficulty of satisfying the independence of observations assumption in traditional statistical

methods and the evaluation of the effect of higher level units based on the number of lower level units (Bryk & Raudenbush, 1992). Second, lower level units can be aggregated and relationships at the aggregate level can be examined. This approach, however, disregards potentially meaningful lower level variance (Hofmann, 1997).

The third approach to statistically analyzing cross-level data is hierarchical linear modeling. HLM overcomes the problems associated with the first two approaches. HLM 5 (Bryk et al., 1996), a software package designed to test hierarchical linear models, was used in testing hypotheses 3 - 14. HLM recognizes that individuals within a particular group are likely more similar to each other than to individuals in other groups and, thus, may not provide independent observations. Unlike the above two methods in which individual and group level residuals are not separately evaluated, this approach models both individual level and group level responses, acknowledging the partial interdependence of individuals within a group (Hofmann, 1997). Essentially, HLM is a two-step procedure. The first step examines relationships among variables within groups, generating intercept and slope parameters that link the individual level independent variable to the individual level outcome variables for each group (i.e., separate regression models are estimated for each group). The second step uses these intercept and slope parameters as outcome variables, regressing them on the Level-2 predictors (i.e., team-member exchange and trust context). The HLM modeling is analogous to linear regression, although the Bayes algorithm is used to estimate the Level-1 components, and is suggested to provide superior precision and reliability (Bryk & Raudenbush, 1992; Morris, 1983).

HLM Analyses--Tests of Hypotheses 3 - 6.

The first necessary condition specifies that there must be systematic within- and between-group variance in the dependent variables. The HLM software produces a one-way ANOVA that can be used to partition the variance into within- and between-group components. Specifically, a null model with no independent variables at Level-1 or Level-2 estimated the following equations:

$$\text{Level-1: } DV_{ij} = \beta_{0j} + r_{ij}$$

$$\text{Level-2: } \beta_{0j} = \gamma_{00} + U_{0j}$$

where

DV = performance, OCBI, OCBO, fairness, and job satisfaction

β_{0j} = mean performance, OCBI, OCBO, fairness, and job satisfaction for group j

γ_{00} = grand mean performance, OCBI, OCBO, fairness, and job satisfaction

$r_{ij} = \sigma^2$ = within-group variance in performance, OCBI, OCBO, fairness, or job satisfaction

$U_{0j} = \tau_{00}$ = between-group variance in performance, OCBI, OCBO, fairness, or job satisfaction

The Level-1 equation has no predictor variable, therefore the regression equation includes only an intercept estimate. The Level-2 model regresses each group's mean dependent variable onto a constant; that is, β_{0j} is regressed onto a unit vector resulting in a γ_{00} parameter that equals the grand mean of the dependent variable (i.e., the mean of group means, β_{0j}).

Using information estimated in the null model, intraclass correlation coefficients (ICCs) were computed representing the percent of the total variance in the

dependent variables that was between groups (cf. Bryk & Raudenbush, 1992). These statistics indicated the amount of variance that could potentially be explained by the Level-2 predictors, team-member exchange and trust context. The following equation was used: $ICC = \tau_{00} / (\tau_{00} + \sigma^2)$ where τ_{00} is the between-group variance in the dependent variable and σ^2 is the within-group variance in the dependent variable. The ICC for performance was .334, indicating that 33.4% of the variance in performance is between groups. The ICC for OCBI was .147, indicating that 14.7% of the variance in OCBI is between groups. The ICC for OCBO was .102, indicating that 10.2% of the variance in OCBO is between groups. The ICC for fairness was .312, indicating that 31.2% of the variance in fairness is between groups. The ICC for job satisfaction was .066, indicating that 6.6% of the variance in job satisfaction is between groups.

The HLM program produces a chi-square statistic that was used to test the significance of the between-group variance. Significant chi-squares for performance ($\chi^2 = 269.67, p < .001$), OCBI ($\chi^2 = 144.01, p < .001$), OCBO ($\chi^2 = 122.65, p < .001$), fairness ($\chi^2 = 252.03, p < .001$), and job satisfaction ($\chi^2 = 100.59, p < .05$) showed that between-group variance is significantly different from zero for each dependent variable, indicating that the intercept term varies across groups.

After assessing the degree of within- and between-group variance in the dependent variables, I examined whether there was significant variance in the intercept parameters estimated at Level-1. Effectively, this test assesses whether leader-member exchange is a significant predictor of the dependent variables. Using a random coefficient regression model (Hofmann, 1997), the following equations were estimated:

Level-1: $DV_{ij} = \beta_{0j} + \beta_{1j}(\text{leader-member exchange}) + r_{ij}$

Level-2: $\beta_{0j} = \gamma_{00} + U_{0j}$

$\beta_{1j} = \gamma_{10} + U_{1j}$

where

DV = performance, OCBI, OCBO, fairness, and job satisfaction

β_{0j} = mean performance, OCBI, OCBO, fairness, and job satisfaction for group j

β_{1j} = grand mean leader-member exchange for group j

γ_{00} = mean of the intercepts across groups

γ_{10} = mean of the slopes across groups (Hypotheses 3 - 6)

$r_{ij} = \sigma^2$ = Level-1 residual variance

$U_{0j} = \tau_{00}$ = variance in the intercepts

$U_{1j} = \tau_{11}$ = variance in the slopes

Since there are no Level-2 predictors of either β_{0j} or β_{1j} , the Level-2 regression equation is equal to an intercept term and a residual. Here, the γ_{00} and γ_{10} parameters represent the Level-1 coefficients averaged across groups (i.e., they represent the pooled β_{0j} and β_{1j} parameters). Given that β_{0j} and β_{1j} are regressed onto constants, the variance of the Level-2 residual terms (i.e., U_{0j} and U_{1j}) represent the between-group variance in the Level-1 parameters.

It should be noted that when using HLM, “centering” variables in particular ways affects substantive conclusions that can be drawn from empirical tests (Hofmann & Gavin, 1998; Kreft, de Leeuw, & Aiken, 1995). Since the intercept term (β_{0j}) is of crucial importance in the Level-2 analyses, it is critical that it be interpretable.

However, the intercept is difficult to interpret when the Level-1 independent variable (leader-member exchange) is not ratio in scale. The intercept is the expected value of the dependent variable when leader-member exchange is zero. Zero cannot, however, be a score that represents leader-member exchange. For this reason, leader-member exchange was grand mean centered (Hofmann & Gavin, 1998). Thus, the intercept β_{0j} is rendered to equal the expected value of the dependent variable when leader-member exchange is at the sample mean. Grand mean centering provides equivalent model fits when compared to raw metric scaling, but generally reduces the covariance between intercept and slope parameters.

T-tests were used to test the significance of γ_{10} for hypotheses 3 - 6. This provides evidence of whether the pooled Level-1 slopes between leader-member exchange and each of the respective dependent variables differs from zero. Thus, this test assesses whether, on average, the relationship between leader-member exchange and each of the dependent variables is significant. Hypothesis 3 predicted that supervisors' perceptions of leader-member exchange would be positively associated with supervisory-rated employee performance. Hypothesis 4 predicted that supervisors' perceptions of leader-member exchange would be positively associated with employees' perceptions of OCBI and OCBO. Hypothesis 5 predicted that supervisors' perceptions of leader-member exchange would be positively associated with employees' perceived fairness shown by the supervisor. Hypothesis 6 predicted that supervisors' perceptions of leader-member exchange would be positively associated with employees' perceptions of job satisfaction.

A summary of the results for these analyses is reported in Table 4. The results indicated that within groups, leader-member exchange was significantly related to performance ($t = 13.44, p < .001$), OCBO ($t = 4.08, p < .001$), fairness ($t = 3.87, p < .001$), and job satisfaction ($t = 3.69, p < .001$). Leader-member exchange was marginally related to OCBI ($t = 1.80, p < .10$). With regard to the latter finding, the result warrants continuing with subsequent analyses. Given that the emphasis was on Level-2 findings, I decided to further explore OCBI as a possible outcome variable. These results provide direct and partial support for hypotheses 3 - 6.

HLM Analyses--Tests of Hypotheses 7 - 14

In order to test hypotheses 7 - 14, HLM procedures dictate that there must be significant variance across groups in the Level-1 intercepts (β_{0j}). The intercept terms represent the between-group variance in the dependent variables after controlling for leader-member exchange. Chi-square tests for the estimates of the intercept (τ_{00}) were performed in order to confirm that there is systematic variance in the intercepts for performance, OCBI, OCBO, job satisfaction, and fairness across groups. If there is not significant between group variance, then a group effect would not exist. A summary of the results is presented in Table 5. The results indicate significant variance in the intercept parameters for the performance ($\chi^2 = 196.90, p < .001$), OCBI ($\chi^2 = 102.09, p < .01$), OCBO ($\chi^2 = 108.42, p < .01$), fairness ($\chi^2 = 168.14, p < .001$), and job satisfaction ($\chi^2 = 101.62, p < .01$) models.

After establishing that there was significant variance across groups in the Level-1 intercepts, hypotheses 7 - 14 were then tested. In particular, I examined if variance in the intercept parameter could be predicted by the Level-2 variables, team-

Table 4

HLM Analysis: Random Coefficient Regression Model

<u>Dependent Variable</u>	<u>Leader-Member Exchange</u>		
	<u>t</u>	<u>γ_{10}</u>	<u>SE</u>
Performance	13.44 ^{***}	.78	.06
OCBI	1.80 [*]	.10	.05
OCBO	4.08 ^{***}	.20	.05
Fairness	3.87 ^{***}	.30	.08
Job Satisfaction	3.69 ^{***}	.24	.06

^{*}p < .10. ^{***}p < .001.

Table 5

HLM Analyses: Variance in Intercept Parameters for Dependent Variables

<u>Dependent Variables</u>	χ^2	τ_{00}	<u>SD</u>
Performance	196.90 ^{***}	.12	.34
OCBI	102.09 ^{**}	.04	.19
OCBO	108.42 ^{**}	.02	.15
Fairness	168.14 ^{***}	.17	.42
Job Satisfaction	101.62 ^{**}	.03	.17

^{**} $p < .01$. ^{***} $p < .001$.

member exchange and trust context. Hypotheses 7 - 10, respectively, predicted that individuals in work groups with a high quality team-member exchange would exhibit higher levels of performance, OCBI, fairness, and job satisfaction than would be expected based on their individual levels of leader-member exchange. Hypotheses 11-14, respectively, predicted that individuals in work groups with a high level of trust context would exhibit higher levels of performance, OCBI, OCBO, fairness, and job satisfaction than would be expected based on their individual levels of leader-member exchange. These hypotheses were tested using the following equations:

$$\text{Level-1: } DV_{ij} = \beta_{0j} + \beta_{1j} (\text{leader-member exchange}) + r_{ij}$$

$$\text{Level-2: } \beta_{0j} = \gamma_{00} + \gamma_{01} (\text{team-member exchange or trust context}) + U_{0j}$$

where

DV = performance, OCBI, OCBO, fairness, and job satisfaction

γ_{00} = Level-2 intercept

γ_{01} = Level-2 slope (Hypotheses 7 - 14)

r_{ij} = Level-1 residual variance

U_{0j} = Residual intercept variance

T-tests were performed to test the significance of γ_{01} . Results of the analyses for team-member exchange are presented in Table 6 and show whether the group level variable has a significant effect on each dependent variable. Significant effects indicate that each dependent variable can be explained by team-member exchange. For performance, team-member exchange did not explain significant variance beyond the effects of leader-member exchange ($t = -1.50$, ns). Thus, hypothesis 7 was not supported. Team-member exchange was, however, significantly associated with

Table 6

HLM Analysis: Intercepts-as-Outcomes Model for Team-Member Exchange

<u>Dependent Variable</u>	<u>t</u>	<u>γ_{01}</u>	<u>SE</u>
Performance	-1.50	-.23	.15
OCBI	11.22 ^{***}	.65	.06
Fairness	3.39 ^{***}	.51	.15
Job Satisfaction	3.41 ^{***}	.39	.11

^{***} $p < .001$.

individual group members' level of OCBI ($t = 11.22, p < .001$), perceptions of fairness shown by the supervisor ($t = 3.39, p < .001$), and job satisfaction ($t = 3.41, p < .001$). These results support hypotheses 8 - 10. In particular, it was found that individuals in work groups with a high quality team-member exchange exhibited higher levels of OCBI, fairness, and job satisfaction than was expected based on their individual levels of leader-member exchange

The following results were found in testing hypotheses 11 - 14. Results of the analyses for trust context are presented in Table 7. As was the case with team-member exchange, trust context did not explain significant variance in performance beyond the effects of leader-member exchange ($t = -1.51, ns$). Thus, hypothesis 11 was not supported. Trust in the supervisor context was significantly associated with individual group members' level of OCBI ($t = 3.60, p < .001$), OCBO ($t = 3.00, p < .01$), perceptions of fairness shown by the supervisor ($t = 17.27, p < .001$), and job satisfaction ($t = 4.79, p < .001$). These results support hypotheses 12 -14. More specifically, it was found that individuals in work groups with a high level of trust exhibited higher levels of OCBI, OCBO, fairness, and job satisfaction than was expected based on their individual levels of leader-member exchange.

Using information from the HLM intercepts-as-outcomes analyses, an overall R^2 for the respective Level-2 equations could be computed. Given the R^2 , one can determine how much of the independent variables' variance is between groups, and subsequently how much of the total variance, can be attributed to a particular Level-2 variable. Generally, trust context was found to explain more of the total between-group variance in the dependent variables than team-member exchange.

Table 7**HLM Analysis: Intercepts-as-Outcomes Model for Trust Context**

<u>Dependent Variable</u>	<u>t</u>	<u>γ_{01}</u>	<u>SE</u>
Performance	-1.51	-.10	.10
OCBI	3.60 ^{***}	.29	.08
OCBO	3.00 ^{**}	.22	.07
Fairness	17.27 ^{***}	.95	.05
Job Satisfaction	4.79 ^{***}	.42	.09

^{**} $p < .01$. ^{***} $p < .001$.

The results for team-member exchange are summarized in Table 8. It was determined that team-member exchange explained 3.6% of the 33.4% of the variance in performance that was between groups, or 1.2% of the total variance; 11.9% of the 14.7% of the between-group variance in OCBI or 1.7% of the total; 10.6% of the 31.2% of the between-group variance in fairness, or 3.3% of the total; and 43.3% of the 6.6% of the between-group variance in job satisfaction, or 3% of the total.

The trust context results are also summarized in Table 8. Trust context explained .3% of the 33.4% of the variance in performance, or .1% of the total variance; 41.3% of the 10.2% of the between-group variance in OCBI, or 4.2% of the total; 40.9% of the 14.7% of the between-group variance in OCBO, or 6% of the total; 64.8% of the 31.2% of the between-group variance in fairness, or 20.2% of the total; and 8.8% of the 6.6% of the between-group variance in job satisfaction, or .6% of the total.

Finally, I assessed whether results were obtained because of any organizational differences between the two companies. This was accomplished by standardizing the data within each organization so as to eliminate differences. Then the standardized data from the two organizations were combined into a single dataset and HLM analyses were run on the standardized data. There was no difference in the results between the standardized and unstandardized data, leading to the conclusion that any potential differences between the two organizations were not significantly responsible for the findings.

Table 8**Total Between-Group Variance in Dependent Variables Explained by the Level-2 Variables, Team-Member Exchange and Trust Context**

<u>Dependent Variable</u>	<u>Team-Member Exchange</u>		<u>Trust Context</u>	
	<u>R^{2a}</u>	<u>Total Variance</u>	<u>R²</u>	<u>Total Variance</u>
Performance	.036	1.2%	.003	.1%
OCBI	.119	1.7%	.413	4.2%
OCBO	NA	NA	.409	6.0%
Fairness	.106	3.3%	.648	20.2%
Job satisfaction	.433	3.0%	.088	.6%

^a R² for team-member exchange and trust context as a Level-2 predictor.

An overview of all the hypotheses and the results is presented in Table 9.

There, each hypothesis is restated, followed by whether the hypothesis was supported or not supported.

Table 9

Summary of Results of Hypotheses

Agreement hypotheses:

Hypothesis 1: There will be homogeneity of perceptions regarding team-member exchange within the group. **Supported**

Hypothesis 2: There will be homogeneity of perceptions regarding trust between the manager and the group as a whole. **Supported**

Leader-member exchange individual level hypotheses:

Hypothesis 3: Leader-member exchange will be positively associated with individual performance. **Marginally Supported**

Hypothesis 4a: Leader-member exchange will be positively associated with OCBO. **Supported**

Hypothesis 4b: Leader-member exchange will be positively associated with OCBI. **Supported**

Hypothesis 5: Leader-member exchange will be positively associated with perceptions of fairness shown by the supervisor. **Supported**

Hypothesis 6: Leader-member exchange will be positively associated with subordinate perceptions of job satisfaction. **Supported**

Team-member exchange cross level hypotheses:

Hypothesis 7: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of individual performance than would be expected based on their individual levels of leader-member exchange. **Not supported**

Table 9 (continued)

Hypothesis 8: Individuals in work groups with a high quality team-member exchange will exhibit higher levels of organizational citizenship behavior than would be expected based on their individual levels of leader-member exchange. **Supported**

Hypothesis 9: Individuals in works groups with high quality team-member exchange will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange. **Supported**

Hypothesis 10: Individuals in work groups with high quality team-member exchange will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange. **Supported**

Trust context cross level hypotheses:

Hypothesis 11: Individuals in work groups with a high level of trust context will exhibit higher levels of performance than would be expected based on their individual levels of leader-member exchange. **Not supported**

Hypothesis 12a: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBO than would be expected based on their individual levels of leader-member exchange. **Supported**

Hypothesis 12b: Individuals in work groups with a high level of trust context will exhibit higher levels of OCBI than would be expected based on their individual levels of leader-member exchange. **Supported**

Table 9 (continued)

Hypothesis 13: Individuals in work groups with a high level of trust context will report higher levels of perceived fairness shown by the supervisor than would be expected based on their individual levels of leader-member exchange. **Supported**

Hypothesis 14: Individuals in work groups with a high level of trust context will exhibit higher levels of job satisfaction than would be expected based on their individual levels of leader-member exchange. **Supported**

Chapter 5: Discussion

Summary of Results

The purpose of this research was to utilize a cross level design to investigate the context of organizational work groups, as it relates to leader-member exchanges and to behaviors and attitudes of relevance to such exchanges. Two relevant group level factors, team-member exchange and trust context, were examined to assess whether they would predict individual level outcome variables of performance, OCBI, OCBO, fairness, and job satisfaction above and beyond the effect of leader-member exchange. In general, the results provided strong support for the existence of the contextual effects in association with team-member exchange and trust context. Each variable was positively associated with OCBI, fairness, and job satisfaction, and explained variance in those same outcome variables above and beyond what was explained by the exchange relationship between the supervisor and his or her subordinate. Trust context additionally was significantly related to OCBO. Contextual effects were not found in connection with performance. The individual level and cross level findings are discussed below.

Individual Level Findings

As noted in Chapter 2, this study looked at the environment within which leader-member exchange takes place. In order to examine possible contextual effects, relationships between leader-member exchange and the outcome variables had to first be established. I examined whether supervisor perceptions of the leader-member exchange quality were related to supervisory-rated performance and employee perceptions of OCBI, OCBO, fairness of the supervisor, and job satisfaction.

Leader-member exchange was positively related to performance. This finding supports previous research that has found such a relationship (Duarte et al., 1994; Dunegan et al., 1992; Gerstner & Day, 1997; Keller & Dansereau, 1995; Klein & Kim, 1998; Scandura & Schriesheim, 1994; Seers & Graen, 1994; Wayne et al., 1997). Employees with a high quality exchange relationship with the supervisor may be better performers because they get additional feedback, resources, and opportunities (Feldman, 1986). In addition, the result could be interpreted as supporting a social exchange perspective that suggests employees perform their required job duties as an obligation to their supervisor (Wayne et al., 1997). Therefore, when there is a strong exchange relationship, employees are more likely to fulfill their role requirements and, consequently, have high levels of performance. Of course, there could also be a leniency bias in the performance ratings extended by supervisors (Duarte et al., 1994). Such bias may result from the supervisor receiving behaviors from the subordinate that are not strictly performance-related, such as loyalty and friendship.

Leader-member exchange was also found to be positively associated with OCBO and marginally associated with OCBI. These results support previous findings regarding these relationships (Masterson et al., 2000; Podsakoff et al., 2000). In a meta-analysis, Podsakoff et al. (2000) found that leader-member exchange positively predicted OCBI, while Masterson et al. (2000) found a significant positive correlation between leader-member exchange and OCBO. The results support a social exchange perspective that organizational citizenship behavior may be used to reciprocate the supportive behaviors shown toward an employee having a high quality relationship with the supervisor.

It has been determined that employees in a high quality leader-member exchange relationship receive support, formal and informal rewards, loyalty, and organizational resources from the supervisor (e.g., Dienesch & Liden, 1986; Graen & Scandura, 1987). Both OCBI (helping behaviors directed towards individual coworkers and the supervisor) and OCBO (helping behaviors directed toward the organization) may be used by employees to reciprocate the behaviors of the supervisor, as both sets of behaviors can be argued to ultimately benefit the supervisor. As members of management, supervisors are often viewed as immediate representatives of the larger organization. Whereas OCBI represents direct assistance to the supervisor or coworkers and indirect benefits to the organization, OCBO yields indirect benefits for the supervisor and direct benefits to the organization.

As might be implied by the definitions of the organizational citizenship behaviors, I expected that a high-quality exchange would result in a stronger relationship with OCBI than OCBO because the former behaviors more directly impact the supervisor. However, this was not the case. Results showed a stronger relationship between leader-member exchange and OCBO ($t = 4.08, p < .001$) than OCBI ($t = 1.80, p < .10$). It may be that employees having a high quality relationship with the supervisor perceive OCBO as benefiting the supervisor as the direct representative of the organization. In addition, six of the seven items measuring OCBI refer to helping coworkers. So, it is plausible that employees viewed OCBI as helping coworkers, and did not necessarily make a connection that such behaviors would help the supervisor as well.

With regard to the attitudinal and perceptual outcomes, leader-member exchange was positively related to perceptions of fairness of the supervisor. As noted in Chapter 2, this is an area that has received little attention in the literature, and this study is among the first to empirically test the relationship. This result supports the idea that employees who have a low quality leader-member exchange relationship might resent their supervisor and perceive him or her as unfair (Yukl, 1989), or perceive that they are treated less well than an employee who has a high quality exchange relationship (Bass, 1990). In other words, fairness perceptions are created from direct experience with the supervisor in one-on-one interactions, and to some extent, by observing and evaluating the exchange relationships between the supervisor and other employees. The result pertaining to fairness jibes with general tenets of how people make fairness judgments. For example, Cropanzano and Greenberg (1997) posit that employees compare and contrast the treatment they and other group members receive from their supervisor to treatment the supervisor gives to other employees in order to determine what is fair.

Finally, leader-member exchange was positively associated with job satisfaction perceptions. This result supports the findings of several previous studies (Graen et al., 1982; Major et al., 1995; Schriesheim et al., 1992; Wilhelm et al., 1993). The supervisor is an important force in defining a subordinate's job. Employees in a high quality exchange relationship with their supervisor receive support, feedback, resources, and collaboration on work-related issues. It appears that the additional benefits provided within a high quality exchange relationship help employees enjoy various job experiences, thus leading to improved job satisfaction. Overall,

collaborating on job-related issues may permit an employee to have inputs into actually changing the job (e.g., enrichment) so that it is intrinsically more appealing or better suited to their specific needs.

In summary, the individual level relationships of leader-member exchange with performance, OCBO, fairness, and job satisfaction, were found to be significant. The relationship between leader-member exchange and OCBI was marginally significant. While some of these findings reinforce previous results, discovering a relationship between leader-member exchange and fairness represents a contribution to a research gap in the leader-member exchange literature. Leader-member exchange theory has assumed there is a connection between the quality of the exchange and the perceived fairness of the supervisor, but heretofore little empirical investigation of the relationship has been conducted.

Cross-Level Findings

With the exception of the two hypotheses related to performance, all of the cross-level hypotheses were supported. Team-member exchange predicted significant variance in OCBI, fairness, and job satisfaction above and beyond what was explained by leader-member exchange. Likewise, trust context explained variance in OCBI, OCBO, fairness, and job satisfaction, even after controlling for variance explained by leader-member exchange. These results indicate that in addition to leader-member exchange dynamics, both team-member exchange and trust context each have an important effect on the outcome variables.

Team-Member Exchange

The hypothesis that team-member exchange would be positively associated with OCBI beyond the effects of leader-member exchange was supported. The result lends credence to the idea that a norm of reciprocity (Gouldner, 1960) may exist within the social exchange relationships of the group. Groups with high quality team-member exchange engage in helping behaviors, such as when some individuals make suggestions to other group members about better work processes. When this happens, these other group members incur an informal obligation to reciprocate the helping behavior with like or other helping behaviors, eventually creating a snowball effect. It is plausible that such help reciprocation could create a group norm for such behavior, as members come to expect certain behaviors to be exhibited by others in the group.

That team-member exchange would be positively associated with fairness beyond the effects of leader-member exchange was also supported. This result is congruent with a social information processing model (Salancik & Pfeffer, 1978). In addition to predicting exchanges that occur between the supervisor and work unit members, social information processing suggests that group members will communicate with each other about their perception of fairness incidents, about their own direct experiences related to fairness with the supervisor, and also about other fairness exchanges that may have occurred out of the presence of other work unit members. In groups with a high quality team-member exchange, group members are communicating with each other about their interactions with the supervisor, their experiences in watching the supervisor interact with other group members, and subsequently conveying their perceptions of the fairness the supervisor shows in

interacting with group members. As these communications take place throughout the group, work group members come to have a shared perception of the level of fairness the supervisor shows to the group as a whole. Research in the area of communication has already established that communication is an integral part of constructing meaning about what is fair (Sias & Jablin, 1995).

In addition, the finding that team-member exchange explained incremental variance in fairness beyond leader-member exchange may also be indicative of how group dynamics can affect individuals in the group (Hackman, 1992). That is, through the control of the stimuli to which group members are exposed, the work group could influence the perceptions of the fairness shown by the supervisor. Such stimuli could include the verbal and overt behaviors displayed by group members that allow the group to develop an overall perception of supervisory fairness in interactions with the group. Perceptions of the fairness shown by the supervisor are formulated by observing the exchange relationships between the supervisor and each of the work group members. For example, suppose a supervisor began to single out a group member because the supervisor overheard the employee making negative comments about her management style. The other group members may know that the comments were indeed accurate, and that the employee has been a good performer. Whenever any of the group members observe or hear about the supervisor interacting negatively with the targeted employee, they might react with disdain for the supervisor. Out of the presence of the supervisor, they could be expected to comment to each other that the supervisor is unfairly picking on the employee. Such a situation will negatively

impact group members' overall perception regarding the fairness shown by the supervisor toward the group.

That team-member exchange was positively related to fairness is also consistent with the group values model (Lind & Tyler, 1988). The group values model argues that people want to be involved in activities of their group and value their status as group members. In encouraging members to participate in group activities, the supervisor allows voice to the group members. Such voice is seen as being fair because it provides opportunities to participate in the group process and because the opportunity to exercise voice constitutes a visible marker of group membership. A work unit with high team-member exchange may view their supervisor as being fair because the supervisor has been a significant player in creating an atmosphere within the group that allows for and encourages participation.

The idea that team-member exchange would be positively associated with job satisfaction beyond the effects of leader-member exchange was supported. Group member suggestions such as how to do the job better could result in less role strain leading to job satisfaction (Hackman, 1992). The emotional and task support received in high team-member exchange work groups could also lead to a more satisfied view of the work done. Effective group processes such as open communication, mutual support, and discussions about how to do the work help work group members feel good about their jobs (Gladstein, 1984). High quality team-member exchanges could facilitate making the immediate work environment more pleasant and friendly contributing to perceptions of overall satisfaction with one's job.

The proposed hypothesis that team-member exchange would predict incremental performance above and beyond the effect of leader-member exchange was not supported. One reason for the lack of a cross-level effect may be due to the fact that team-member exchange accounted for only 3.6% of the between-group variance in performance. The lack of support for this hypothesis may be indicative of the primacy of the impact of the leader-member exchange relationship on individual performance in this study. Although coworkers might provide help with tasks, ultimately responsibility for completing the tasks laid with individual employees. For the sample selected, it may be that employees could make suggestions about things that impact each other's work, but there may have been little impact on individuals' job performance as structured by the supervisor.

A future research issue would involve assessing other individual level predictor variables, such as task interdependence, to determine whether team-member exchange explains a significant amount of the variance in performance when group members must count on one another to complete their work. Perhaps in groups where the work members perform is sequentially dependent on the work other group members carry out, there may be a more direct affect on the relationship between team-member exchange and performance. Many of the employees who participated in this study did not perform jobs that were sequentially linked.

In addition, performance in the organizations studied may be a more individual oriented variable. Consistent with how performance was generally treated in each organization, performance as measured in this study focused on efforts made by the individual. In this case, performance of the group was not measured. In contrast, the

other dependent variables are more social and relational in nature. One's perception of the fairness of the supervisor takes into account not only direct interactions with the supervisor, but is influenced by others' interactions and perceptions of the work environment as employees compare and contrast to define what is fair within their context. Satisfaction with one's job is affected by others in the work environment who provide suggestions and assistance, and influence the pleasantness of the work environment through social interactions.

In summary, the results of this study show support for the existence of a contextual effect for team-member exchange. Above and beyond the effect of the leader-member exchange relationship, team-member exchange was positively associated with OCBI, fairness, and job satisfaction.

Trust Context

The hypotheses that trust context would be positively associated with OCBI and OCBO beyond the effects of leader-member exchange were supported. As noted in Chapter 2, even though organizational citizenship behavior is not formally recognized by the organization, across time such behaviors can result in rewards through salary increases, bonuses, and/or career opportunities (Organ, 1997). It may be that in groups with a positive trust context, individuals believe citizenship behaviors may be more readily recognized by their supervisor. If employees hold this general belief, organizational citizenship behavior is more likely to be seen as more directly instrumental and therefore exhibited. While helping behaviors directed toward individual coworkers and the supervisor (OCBI) can connote a positive relationship with the supervisor and may be used to reciprocate helping behaviors

received from the supervisor, helping behaviors aimed toward the organization (OCBO) also reciprocate such behaviors. Trust context explained similar amounts of between-group and total variance in both types of organizational citizenship behavior. It may be that at the group level, the trust context provides an atmosphere that supports positive feelings about the organization as a whole as well as the supervisor.

The hypothesis that trust context would be positively associated with fairness beyond the effects of leader-member exchange was also supported. This result is consistent with Tyler's (1994) contention that when supervisors are perceived as trustworthy by the work group, subordinates are more willing to judge them as being fair. The results showed that trust context explained 20.2% of the total variance in the perceived fairness of the supervisor, more total variance than for the other four outcome variables. Indeed, this relationship explained more total variance than any of the other contextual relationships. When there is a trust context in a work group, the members may believe the supervisor has altruistic motives, and view the supervisor as being competent, responsible, reliable, and dependable (Lewis & Wiegert, 1985). These characteristics are indicative of a supervisor who would behave toward his or her employees in a fair fashion.

The finding that trust context predicts incremental variance in fairness beyond the effects of leader-member exchange is also consistent with the group value model. The model posits that employees are concerned and care about their long-term social relationship with management (Lind & Tyler, 1988). Unless specified to the contrary, membership in a work group may be generally assumed by members to be longer term. Supervisors are given discretion in how they interact and manage their

employees (Tyler & Bies, 1990). Thus, employees may expect that managers, for the most part, control and define the manner in which they interact with employees. Trust context involves the belief by the group that their supervisor intends to treat employees both fairly and with respect. These intentions are very important because prevailing interactions with the supervisor help employees predict future interactions (Tyler, 1989). If employees believe the supervisor is being fair and will remain so into the future, they will develop long-term commitment to the work group and organization.

Also supported was the idea that a trust context would be positively associated with job satisfaction beyond the effects of leader-member exchange. As noted in Chapter 2, in work groups that share a high level of trust in their supervisor, there is likely to be a high level of employee input into matters affecting task achievement and the overall design of their jobs. Empowerment in work groups is a trust-based process (DuBrin, 1998). As trust is built, employee inputs into work-related matters increases. Such empowerment provides employees with a sense of ownership and control, and consequently they may tend to be more satisfied with their jobs (Hackman & Oldham, 1976).

The finding that a trust context is positively associated with job satisfaction beyond the effects of leader-member exchange has another possible explanation. Supervisors are responsible for many tasks that can affect employees' satisfaction, such as performance appraisals, job and career direction, and training in team skills (Rich, 1997). A work group is likely to feel safer and more positive about a supervisor making these decisions if they believe the supervisor is responsible,

impartial, and competent. The implication is that a context of trust in the supervisor should be associated with job satisfaction.

The proposed hypothesis that trust context would predict performance above and beyond the effect of leader-member exchange was not supported. The results of the study provide evidence of one reason for the lack of a cross-level effect. Similar to team-member exchange, trust context accounted for only a small portion of the between-group variance in performance. Perhaps this nonsignificant result can be understood by reflecting on different components comprising trust. Some researchers have noted that trust in has both cognitive- and affect-based components (e.g. Lewis & Wiegert, 1985). Cognitive-based trust exists where group members trust others because they respect their competency, responsibility, reliability, and dependability. Affect-based trust, on the other hand, is emotion-based whereby work unit members believe the motives of the supervisor are altruistic in nature and not self-motivated. Given these definitions, it is plausible that a trust context assessed in terms of a cognitive-based component might explain and predict performance, as the employees would have more concrete evidence that the supervisor has something to add in terms of knowledge and expertise. Where the supervisor has demonstrated competence and dependability, it would not be surprising to find that employees could model such behavior as their own. In work groups where the members have cognitive-based trust in the supervisor, they are more likely to execute roles specified by the supervisor and work harder in those roles thus leading to increased performance (Dirks & Ferrin, 2000).

As noted in connection with team-member exchange, performance in this study was measured at the individual level. It may be that the relationship between the supervisor and the individual group member is a primary component in connection with the individual's performance. In association with trust context, a reasonable future research consideration would be to measure the effect of trust context on group performance. The group's perception of the trustworthiness of the supervisor may have more of an impact when the performance component is a group effort.

In summary, the results of this study show support for the existence of a contextual effect for trust in the supervisor. Above and beyond the effect of the leader-member exchange relationship, trust context was positively associated with OCBI, OCBO, fairness, and job satisfaction.

Contributions to the Literature

Evidence exists that leadership processes are impacted by the context in which they occur (Green, Anderson, & Shivers, 1996; Yukl, 1994), so the lack of attention to the context within which leader-member exchange takes place is troubling. By beginning to better understand the social context within which leader-member exchange occurs, the present study has attempted to advance the literature on leader-member exchange. In particular, two group level constructs, team-member exchange and trust context, predicted variance in several outcome variables beyond the effect of leader-member exchange. The results provide evidence that the overall exchange relationship among work unit members as well as the trust context are both significant predictors of work-related behaviors and attitudes.

Knowledge in the area of work groups has been advanced by examining team-member exchange relationships within work units and their impact on important behavioral and attitudinal outcomes. Scholars have known since the Hawthorne studies that group dynamics have a major impact on the behavior of work group members. In addition, groups are a prominent feature in organizations in the United States, with a recent study finding that 68% of Fortune 1000 companies use groups (Lawler, Mohrman, & Ledford, 1995). Unfortunately, although team-member exchange has been conceptualized at the group level and recognized as a group level phenomenon (Seers, 1989), methodologically it has been tested only as an individual level variable. The present study used appropriate aggregation methodology to operationalize team-member exchange, finding that it meaningfully affects employee behaviors and attitudes. It is important to use appropriate methodology to study team-member exchange due to the crucial role groups perform in organizations. If researchers want to examine groups, group level measures or appropriate aggregation procedures for individual level measures must be used (Gully et al., 1995; Rousseau, 1985).

The study of trust has been broadened by assessing the construct as a contextual variable. Trust is a multilevel construct whereby microlevel trust relations between a supervisor and an individual employee are affected by more macrolevel trust processes such as those occurring between the work group and its supervisor (Kramer, 1999; Rousseau et al., 1998; Sitkin, 1995). A group's global perception of the trustworthiness of its supervisor is affected by each member's personal experiences with the supervisor, as well as observations or communications about the

supervisor's interactions with other group members. The trustworthiness of supervisors in prior interactions with other employees is important. The work group makes such interactions known to the group, and helps group members to interpret the trustworthiness of the interactions. Therefore, the work group can encourage or restrict trust relations through providing information about group-relevant trust-related interactions. The present study indicates that group level trust perceptions exist and are associated with some oft-studied organizational outcome variables.

In addition to the more direct future research implications broached above, other empirical ideas can be offered. Researchers in the area of leader-member exchange have suggested studying the social context within which leader-member exchanges take place (Cogliser, 1996; Graen & Uhl-Bien, 1995; Liden et al., 1997; Uhl-Bien et al., 2000). The leader-member exchange relationship comprises not only the characteristics of the leader and the subordinate and their interaction, but the situation within which their interaction occurs. In today's complex organizations, the circumstances of leadership are characterized by a supervisor and multiple subordinates who work together in some type of collectivity, such as a department or team. This study has offered a start by examining the contextual affects of team-member exchange and trust context.

Possibly other contextual effects could also be examined, such as the extent to which teams are self-managed. Self-managed teams are those wherein the traditional decision-making role of the supervisor is delegated to the group (Cohen & Bailey, 1997; Manz, 1992; Manz & Sims, 1993). For instance, self-managed teams often determine work methods and schedules, assign the group's job tasks, solve quality and

interpersonal problems, and conduct team meetings (Lawler, 1986, 1988; Manz & Sims, 1990, 1993). Characteristics of self-managed groups include high levels of group autonomy and substantive participation. It has been empirically established that self-managed teams employ more shared behaviors, experience superior cohesiveness, and participate more in group decision making than work groups led by a supervisor in a more traditional manner (Seers et al., 1995). In self-managed teams where the group sets performance goals, there might be a significant impact on performance, as well.

Earlier it was noted that whereas the trust literature has tended to examine trust at the individual level of analysis, there has been a call to researchers to view trust as a multilevel construct (e.g., Jones & George, 1998; Rousseau et al., 1998; Whitener et al., 1998). As noted above, cognitive-based trust in the supervisor should be examined with regard to performance. It would be interesting to assess trust in the group as a contextual variable in terms of both its affect- and cognitive-bases. If work unit members can share a perception of trust in the supervisor, it is plausible that they share an overall perception of trust about each other. To varying degrees, group members must cooperate with each other to accomplish goals and objectives. As organizations continue their use of groups and self-managed teams, in particular, trust in each other will play a critical role in the successful functioning of work groups. Increased trust within the group can facilitate involvement, cooperation, and positive attitudes (Jones & George, 1998). Given the involvement group members have with each other, it is important to study the level of trust within the group and whether different bases of trust affect important outcome variables.

Limitations

As is the case with most research, several limitations of the present study should be noted in interpreting the results. First, the data was collected from employees and supervisors at a single point in time. The use of cross-sectional data limits one's ability to make causal inferences. A longitudinal study might provide greater insight into the development of the Level-2 predictor variables and demonstrate whether increments in the outcome variables follow this development. It might also indicate how contexts develop, whether they are stable across time, etc. Of course, generalizability across populations may be a question as only two different organizations were studied. However, the two organizations were from two relatively diverse industries, banking and manufacturing. More organizations should be studied, especially organizations with work groups that differ in their task interdependence. For example, in the case of team-member exchange, groups that are highly task interdependent and also have positive team-member exchange levels may experience greater than expected performance (Gully et al., 1995). In such work groups, it might be likely that a high quality team-member exchange could affect coordination, cooperation, and communication leading to superior performance.

Lastly, the effect sizes associated with the significant cross-level results are not large in magnitude. It could be asserted that such small effect sizes have limited practical value. However, some have argued (Abelson, 1985; Rosenthal, 1990) that it is important to give some consideration to how focal variables might function in the real world. For example, it is plausible that the longer individuals are in a work unit with a high quality team-member exchange, the more likely it is that such a context

would affect their organizational citizenship behavior. In other words, small effect sizes may accumulate across time. It may be plausible that small effect sizes in cross-sectional studies understate the potential variance contribution over the long run. Therefore, effect sizes found in this study might not only be expected, but may be meaningful in the workplace.

Lastly, there is a possible overlap in content of some of the items between team-member exchange and OCB and between trust context and fairness. These scales should be examined in the future to determine the content validity of the measures.

Implications for Practice

The positive effect of a high quality exchange on important work-related behaviors and attitudes has been supported by the results. Organizations should encourage their supervisors and employees to create high quality leader-member exchange relationships. Uhl-Bien et al. (2000) offer advice on how to create a high quality exchange relationship. When a supervisor and employee begin interacting, they do so as strangers. As they become acquainted, role-making, which produces high quality exchange relationships, occurs as supervisors and subordinates actively participate in defining their roles in the exchange relationship and in the organization (Graen & Scandura, 1987; Graen & Wakabayashi, 1994). Role-making involves either person offering to go beyond the formally defined role and continues if the other party accepts the offer. This initiates testing to ascertain the capabilities, motivations, and obligation of the other person. Based on the outcomes of role-making, the

individuals can decide either to keep the relationship within the formal employment contract or to expand the relationship beyond contractual obligations.

The finding of a contextual effect for team-member exchange reinforces the importance of teams or work groups in organizations. It is essential that management in organizations not simply announce that from this day forward, we will operate in teams or work groups. Given the critical impact team-member exchange has on vital outcome variables, management should treat the formation, development, and maintenance of work groups as they would an investment in new technology (Forrester & Drexler, 1999). Employee contributions to the firm's performance are dependent on how the employees interact with each other through interpersonal relationships. Such interpersonal relationships are referred to as social capital (Burt, 1997).

Social capital in the form of effective work relationships will become a crucial critical advantage as organizations face increasing competitive pressures. Employees' knowledge, skills, and abilities make contributions to the organization in proportion to how well they interact with each other in the work place. Organizations can reinforce the progress of social capital by facilitating the development of high-quality relationships, supporting the creation of organization-wide networks linking employees through interpersonal relationships, and fostering a culture that helps to create interpersonal relationships with other employees and identification with the organization (Uhl-Bien et al., 2000). Moreover, organizations can reinforce these actions by including components in the performance appraisal and rewards systems that directs attention to effective relationship development.

Organizations should ensure that management supports a philosophy that encourages the development and growth of work groups with salient policies and practices. For example, management should ask is the ability to work in a group a part of the selection process, is it rewarded to some extent in the compensation system, is it addressed in the performance appraisal process, and does the organization provide its groups with appropriate training? Training must be offered to work groups on a continual basis to develop and maintain relevant group skills. Such skills include conflict management, time management, decision-making, problem-solving, communication, and valuing diversity (Brauchle & Wright, 1993; Campion et al., 1996; Caudron, 1994, 1995).

It is also important that both supervisors and work groups understand their roles and relationships with one other. When organizations create work groups, management is not abdicating its responsibility, but rather delegating some of those responsibilities to work groups (Seers, 1989). A close relationship between the work group and supervisor can facilitate delegation in the long run. Communication with, and education of, supervisors and work groups should include specifying role and relational expectations.

The finding of contextual effects for trust in the supervisor indicates that trust is paramount to address in organizations. Trust in supervision can impact an employee's loyalty and commitment to the group and the company (Tyler, 1989). Especially in the current tight labor markets, loyalty from valued employees could be an important commodity. Reduced employee loyalty has increased the typical turnover rate of organizational employees (e.g., Evans, Gunz, & Jalland, 1996). It is

plausible that employees who trust their supervisor would be more likely to remain with the organization.

The finding of beneficial trust context effects supports the idea that organizations should conduct activities that build, develop, and sustain trust in supervisors. This might be done, for example, by rewarding supervisors who initiate trust and employees who reciprocate the offer. A study by the International Association of Business Communicators Research Foundation of 4,000 employees in eight countries identified five factors important to creating trust in the workplace (“Creating organizational trust,” 2000). Supervisors and coworkers should be effective or competent in their jobs. Communication should be open, honest, accurate, and sincere. There should be a general concern for employees in the group or organization. Actions and behaviors should be consistent and dependable. Lastly, trust is fostered when group members share common goals, values, and beliefs. It is important that time be made available for people to build relationships (Cufaude, 1999). After all, it is difficult for people to trust others who they do not know. In addition, understanding the roles and responsibilities of the parties involved helps create trust.

Training can also be provided to enhance supervisors’ understanding of the importance of trust in their role as a supervisor. Training can educate supervisors on the significance of trust to the organization and how to build, develop, and maintain it. In particular, training can be provided in areas associated with trustworthy behavior, such as leadership, participation in decision making, delegation, fairness, and

communication (Whitener et al., 1998). As managers increase such skills, they will be more likely to initiate and exercise trustworthy behavior.

An atmosphere of trust in the supervisor may provide the organization with a competitive advantage (Barney & Hansen, 1994). Pressures from competitors and the environment are requiring organizations to change their form and structure.

Organizations are moving to flatter and more team-oriented structures where employees will have even greater autonomy (Hammer & Champy, 1993). In order to make the necessary changes to be competitive, employees must be involved, and it is imperative that supervisors create an atmosphere of trust in order to get their active involvement. Given that there are limits to how much monitoring an organization can do of its employees (Grant, 1992), high levels of trust between supervisors and employees is critical so that organizations of the future will remain successful.

In conclusion, the purpose of this dissertation was to examine the context of work groups as it relates to leader-member exchanges and to behaviors and attitudes of concern to such relationships. To achieve this objective, a cross level study was conducted. At the group level, team-member exchange and trust context were examined. Both team-member exchange and trust contexts affected important individual level outcome variables. Each group level variable was positively associated with OCBI, fairness, and job satisfaction. Trust context was additionally related to OCBO. Each of the contextual variables explained variance in those same outcome variables above and beyond what was explained by the exchange relationship between the supervisor and his or her subordinate. The results of this study not only provide evidence of group level exchange relationships among work unit members,

but also that the group as a whole harbors trust perceptions about the supervisor.

Several potential contributions to the leader-member exchange, group, and trust literatures have been offered. It is hoped that the current study will encourage further research examining the context within which the leader-member exchange takes place, the role of relational group processes in organizations, and the concept of trust as a multilevel construct.

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Appendix A: Letter from Bank Management

Memo

From: Steve Lousteau <slousteau@HIBERNIA.COM> on 04/24/2000 03:35 PM

Sent by: Steve Lousteau <slousteau@HIBERNIA.COM>

To: CGWALE@HIBERNIA.COM, DAGATHE@HIBERNIA.COM,
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cc: Barbara A Wech/bwech1/LSU@LSU

Subject: LSU study

Managers,

Dr. Willie Staats, who is the Banking Chair in the College of Business at LSU, asked if I would help a graduate student with a research project. I agreed to help.

Barbara Wech (pronounced "way") met with me and explained what she is doing and how we can help her. Her research involves collecting data through a survey which determines how group members interact with each other and their manager. Her study will ascertain the effect on employees' performance, productivity, commitment to the organization, and satisfaction with their jobs.

I am asking you to allow Barbara to come to your branch one morning and administer her survey. It should not take more than 20-25 minutes. I will give Barbara your name and branch phone number and she will contact you to set up a time and date.

Thanks for assisting.
Steve

Appendix B: Scale Items

Leader-member exchange (Graen & Uhl-Bien, 1995)

This employee knows where he/she stands; he/she usually knows how satisfied I am with what he/she does.

I understand this employee's job problems and needs.

I recognize this employee's potential.

Regardless of how much formal authority I have built into my position, I would use that power to help this employee solve problems in his/her work.

Again, regardless of the amount of authority I have, I would "bail this employee out" at my expense.

This employee would have enough confidence in me that he/she would defend and justify my decision if I were not present to do so.

This employee believes we have an effective working relationship.

Performance

Quantity of work

Quality of work output (including customer service, both internal and external)

Develops reasonable plans and meets deadlines

Makes effective and timely decisions

Has been effectively fulfilling his/her roles and responsibilities (overall performance)

Organizational citizenship behavior (Williams & Anderson, 1991)

OCBI (directed at individuals):

I help others who have been absent.

I help others who have heavy work loads.

I take time to listen to coworkers' problems and worries.

I go out of my way to help new employees.

I take a personal interest in other employees.

I pass along information to coworkers.

I assist my supervisor with his/her work when not asked.

OCBO (directed at the organization):

I have work attendance that is above the norm.
I give advance notice when unable to come to work.
I take undeserved work breaks. (R)
I spend a great deal of time with personal phone conversations. (R)
I complain about insignificant things at work. (R)
I conserve and protect organizational property.
I adhere to informal rules devised to maintain order.

Job satisfaction (Hackman & Oldham, 1975)

Generally speaking, I am very satisfied with this job.
I frequently think of quitting this job. (R)
I am generally satisfied with the kind of work I do in this job.
Most people on this job are very satisfied with the job.
People on this job often think of quitting. (R)

Fairness (Donovan, Drasgow, & Munson, 1998)

Supervisors play favorites. (R)
Employees are trusted.
Employees' complaints are dealt with effectively.
Employees are treated like children. (R)
Employees are treated with respect.
Employees' questions and problems are responded to quickly.
Employees are lied to. (R)
Employees' suggestions are ignored. (R)
Employees' hard work is appreciated.
Employees are treated fairly.

Team-member exchange (Seers, Petty, & Cashman, 1995)

How often do you make suggestions about better work methods to other team members?

Do other members of your team usually let you know when you do something that makes their jobs easier (or harder)?

Do other members of your team usually let you know when they have done something that makes your job easier (or harder)?

How well do other members of your team recognize your potential?

How well do other members of your team understand your problems and needs?

How flexible are you about switching job responsibilities to make things easier for other team members?

In busy situations, how often do other team members ask you to help out?

In busy situations, how often do you volunteer your efforts to help others on your team?

How willing are you to help finish work that has been assigned to others?

How willing are other members of your team to help finish work that was assigned to you?

Trust context (McAllister, 1995)

Our group has a sharing relationship with our supervisor. The group together with our supervisor can freely share our ideas, feelings, and hopes.

My coworkers and I can talk freely to our supervisor about difficulties we are having at work and know that (s)he will want to listen.

Our group and our supervisor would feel a sense of loss if one of us was transferred and we could no longer work together.

If my coworkers or I shared our problems with our supervisor, she would respond constructively and caringly.

I would have to say that my group and our supervisor have both made considerable emotional investments in our working relationship.

My coworkers and I feel that our supervisor approaches his/her job with professionalism and dedication.

Given our supervisor's track record, my coworkers and I see no reason to doubt his/her competence and preparation for the job.

My coworkers and I can rely on our supervisor not to make our jobs more difficult by careless work.

Most people, even those who aren't close friends of my supervisor, trust and respect him/her as a coworker.

Other work associates of mine who are outside of my work group who must interact with our supervisor consider him/her to be trustworthy.

Appendix C: Employee Survey

The following questions concern your working relationship with your immediate supervisor/manager. This is the person you report to. Please indicate your agreement or disagreement with each statement. In the blank next to each statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following scale:

1. strongly agree 2. agree 3. not sure 4. disagree 5. strongly disagree

- _____ I know where I stand; I usually know how satisfied my supervisor is with what I do.
- _____ My supervisor understands my job problems and needs.
- _____ My supervisor recognizes my potential.
- _____ Regardless of how much formal authority my supervisor has built into his/her position, he/she would use that power to help me solve problems in my work.
- _____ My supervisor would "bail me out" at his/her expense.
- _____ I would defend and justify my supervisor's decision if he/she were not present to do so.
- _____ I have an effective working relationship with my supervisor.
- _____ I assist my supervisor with his/her work when not asked.
- _____ My supervisor plays favorites.
- _____ Employees are trusted by my supervisor.
- _____ Employees' complaints are dealt with effectively by my supervisor.
- _____ Employees are treated like children by my supervisor.
- _____ Employees are treated with respect by my supervisor.
- _____ Employees' questions and problems are responded to quickly by my supervisor.
- _____ Employees are lied to by my supervisor.
- _____ Employees' suggestions are ignored by my supervisor.
- _____ Employees' hard work is appreciated by my supervisor.
- _____ Employees are treated fairly by my supervisor.

The following questions concern the working relationship between your work group and your immediate supervisor. When answering these questions, keep in mind how the whole work group, on average, feels.

- _____ Our group has a sharing relationship with our supervisor. The group together with our supervisor can freely share our ideas, feelings, and hopes.
- _____ My coworkers and I can talk freely to our supervisor about difficulties we are having at work and know that (s)he will want to listen.
- _____ Our group and our supervisor would feel a sense of loss if one of us was transferred and we could no longer work together.
- _____ If my coworkers or I shared our problems with our supervisor, he/she would respond constructively and caringly.

1. strongly agree 2. agree 3. not sure 4. disagree 5. strongly disagree

- _____ I would have to say that my group and our supervisor have both made considerable emotional investments in our working relationship.
- _____ My coworkers and I feel that our supervisor approaches his/her job with professionalism and dedication.
- _____ Given our supervisor's track record, my coworkers and I see no reason to doubt his/her competence and preparation for the job.
- _____ My coworkers and I feel that our supervisor has the skills and abilities to perform his/her job.
- _____ My coworkers and I feel that our supervisor has the knowledge to perform his/her job.
- _____ My coworkers and I can rely on our supervisor not to make our jobs more difficult by careless work.
- _____ Most people, even those who aren't close friends of my supervisor, trust and respect him/her as a coworker.
- _____ Other work associates of mine who are outside of my work group who must interact with our supervisor consider him/her to be trustworthy.

The following questions concern your working relationship with your work group.

- _____ I help others who have been absent.
- _____ I help others who have heavy work loads.
- _____ I take time to listen to co-workers' problems and worries.
- _____ I go out of my way to help new employees.
- _____ I take a personal interest in other employees.
- _____ I pass along information to co-workers.
- _____ I often make suggestions about better work methods to other work group members.
- _____ Other members of my work group usually let me know when I do something that makes their jobs easier (or harder).
- _____ Other members of my work group usually let me know when they have done something that makes my job easier (or harder).
- _____ Other members of my work group recognize my potential.
- _____ Other members of my work group understand my problems and needs.
- _____ I am flexible about switching job responsibilities to make things easier for other work group members.
- _____ In busy situations, other work group members ask me to help out.
- _____ In busy situations, I volunteer my efforts to help others on my work group.
- _____ I am willing to help finish work that has been assigned to others.
- _____ Other members of my work group help finish work that was assigned to me.
- _____ I work closely with others in doing my work.
- _____ I frequently must coordinate my efforts with others.
- _____ My own performance is dependent on receiving accurate information from others.

1. strongly agree 2. agree 3. not sure 4. disagree 5. strongly disagree

- ___ The way I perform my job has a significant impact on others.
- ___ My work requires me to consult with others fairly frequently.
- ___ I work fairly independently of others in my work.
- ___ I can plan my own work with little need to coordinate with others.
- ___ I rarely have to obtain information from others to complete my work.
- ___ In order to do my job, I need to spend most of my time talking to other people.
- ___ In my job, I am frequently called on to provide information and advice.
- ___ I work fairly independently of others in my work.
- ___ The group can freely share our ideas, feelings, and hopes with each other.
- ___ My coworkers and I can talk freely to each other about difficulties we are having at work and know that we will want to listen.
- ___ Our group would feel a sense of loss if one of us was transferred and we could no longer work together.
- ___ If my coworkers or I shared our problems with each other, we would respond constructively and caringly.
- ___ I would have to say that my group has made considerable emotional investments in our working relationships.
- ___ My coworkers and I feel that we approach our job with professionalism and dedication.
- ___ Given each others track record, my coworkers and I see no reason to doubt each others competence and preparation for the job.
- ___ My coworkers and I can rely on each other not to make our jobs more difficult by careless work.
- ___ Most people, even those who aren't close friends of people in my group, trust and respect people in my group as coworkers.
- ___ Other work associates of mine who are outside of my work group who must interact with people in my group consider them to be trustworthy.
- ___ My coworkers and I feel that we each have the skills and abilities to perform our jobs.
- ___ My coworkers and I feel that we each have the knowledge to perform our jobs.

The following questions concern your job and work-related attitudes.

- ___ Generally speaking, I am very satisfied with this job.
- ___ I frequently think of quitting this job.
- ___ I am generally satisfied with the kind of work I do in this job.
- ___ Most people on this job are very satisfied with the job.
- ___ People on this job often think of quitting.
- ___ I have work attendance that is above the norm.
- ___ I give advance notice when unable to come to work.

1. strongly agree 2. agree 3. not sure 4. disagree 5. strongly disagree

- _____ I take undeserved work breaks.
_____ I spend a great deal of time with personal phone conversations.
_____ I complain about insignificant things at work.
_____ I conserve and protect organizational property.
_____ I adhere to informal rules devised to maintain order.

Again, your individual responses are confidential.

How long have you been employed by Fisher/Hibernia?

_____ years _____ months

How long have you worked at this location?

_____ years _____ months

Are you a full-time or part-time employee? (Please circle the answer.)

Circle your level of education:

1 = some high school 2 = high school diploma 3 = some college
4 = college degree 5 = some graduate school 6 = graduate degree

Circle your gender: Male Female

Circle your race: white African-American Hispanic Asian Other

What is your age? _____

Thank you again for your participation.

Appendix D: Supervisor Survey

How long have you been employed by Fisher/Hibernia?

_____ years _____ months

How long have you worked at this location?

_____ years _____ months

Circle your level of education:

**1 = some high school 2 = high school diploma 3 = some college
4 = college degree 5 = some graduate school 6 = graduate degree**

Circle your gender: Male Female

Circle your race: white African-American Hispanic Asian Other

What is your age? _____

(Continued on the next page)

Indicate the degree of your agreement or disagreement with each statement. In the blank next to the statement, write the number 1, 2, 3, 4, or 5 which corresponds to the following:

1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly disagree

Below are statements regarding your department as a whole.

- _____ Employees in my group make suggestions about better work methods to other work group members?
- _____ Employees in my group usually let each other know when they do something that makes their jobs easier (or harder)?
- _____ Employees in my group recognize each other's potential?
- _____ Employees in my group understand each others' problems and needs?
- _____ Employees in my group are flexible about switching job responsibilities to make things easier for other work group members?
- _____ In busy situations, employees in my group ask each other to help out?
- _____ In busy situations, employees in my group volunteer their efforts to help others on the work group?
- _____ Employees in my group are willing to help finish work that has been assigned to others?

(Continued on the next page)

The remaining scales must be completed on each employee under your supervision.

Employee name: _____

This employee:

- _____ helps others who have been absent.
- _____ helps others who have heavy work loads.
- _____ takes time to listen to co-workers' problems and worries.
- _____ goes out of way to help new employees.
- _____ takes a personal interest in other employees.
- _____ passes along information to co-workers.
- _____ assists me with my work when not asked.
- _____ has work attendance that is above the norm.
- _____ gives advance notice when unable to come to work.
- _____ takes undeserved work breaks.
- _____ spends a great deal of time with personal phone conversations.
- _____ complains about insignificant things at work.
- _____ conserves and protects organizational property.
- _____ adheres to informal rules devised to maintain order.
- _____ This employee knows where he/she stands; he/she usually knows how satisfied I am with what he/she does.
- _____ I understand this employee's job problems and needs.
- _____ I recognize this employee's potential.
- _____ Regardless of how much formal authority I have built into my position, I would use that power to help this employee solve problems in his/her work.
- _____ Again, regardless of the amount of authority I have, I would "bail this employee out" at my expense.
- _____ This employee would have enough confidence in me that he/she would defend and justify my decision if I were not present to do so.
- _____ This employee believes we have an effective working relationship.

Please assess this employee's performance using the following scale:

- 1 = Outstanding (Results obtained are far in excess of the requirements)
- 2 = Exceeds expectations (Achieves skills and results beyond direct responsibility)
- 3 = Meets expectations (Meets results expected of a qualified employee)
- 4 = Below expectations (Results fall below expected levels of accomplishments)
- 5 = Unacceptable (Sustained improvement is mandatory)

- _____ Quantity of work
- _____ Quality of work output (including customer service, both internal and external)
- _____ Develops reasonable plans and meets deadlines
- _____ Makes effective and timely decisions
- _____ Has been effectively fulfilling his/her roles and responsibilities (overall performance)

Vita

Barbara A. Wech received her bachelor of science degree in psychology from Wayne State University in Detroit. She earned a master's degree in labor and industrial relations from Michigan State University. She worked in a Fortune 100 company as a human resources manager for seven years prior to entering Louisiana State University for her doctoral studies. Barbara is co-author of a paper that appeared in Small Group Research and has presented papers at the annual meetings of the Southern Management Association. Her research interests include group and cross level processes, and leadership. She will receive the degree of Doctor of Philosophy in business administration (management) at summer commencement 2001. Barbara will begin her academic career as an assistant professor at the University of Alabama-Birmingham.

DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Barbara A. Wech

Major Field: Business Administration (Management)

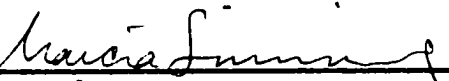
Title of Dissertation: Team-Member Exchange and Trust Contexts: Effects on Individual Level Outcome Variables Beyond the Influence of Leader-Member Exchange

Approved:


Major Professor and Chairman


Dean of the Graduate School

EXAMINING COMMITTEE:









Date of Examination:

25 June 2001
